



Caribbean Environment Programme

United Nations Environment Programme

Ecotourism in the Wider Caribbean Region - An Assessment -



CEP Technical Report No. 31

1994



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TABLE OF CONTENTS

	Page
List of Tables	iv
Summary	v
-Background	v
-Methodology and scope of the study	v
-Structure of the report	vii
-Note	viii
 I. Synthesis	 1
A. Ecotourism: Scope and Definitions	1
1. Initial considerations	1
2. Definitions	3
a. Ecotourism	3
b. Ecotourists	4
B. Analysis and Conclusions	5
1. The Practice and Concept of Ecotourism	5
2. Significance and Impact of Tourism	7
3. Ecotourism and Protected Areas	9
a. Importance of Protected Areas	9
b. Capacity of Protected Areas	9
4. Context and Status of Ecotourism	11
a. Institutional Factors	11
b. Approach to Planning	12
c. Priority Requirements	12
d. Achievements and Failures of Ecotourism	13
C. Guidelines for the Development of Ecotourism	13
1. Useful References (Documents)	14
2. Basic Premises	16
3. Some Strategic Proposals	17
 II. Results of the Survey	 20
A. The General Context	20
1. Contribution of the Tourism Sector to the Economy	20
a. Contribution to gross Domestic Product	20
b. Contribution to Employment	21
c. Contribution to Foreign Exchange Earnings	21

TABLE OF CONTENTS (contd.)

	Page
2. Hotel Capacity and Number of Visitors	22
a. Number of Rooms and Occupancy Levels	22
b. All-inclusive Resorts	23
c. Visitors Arrivals	23
B. Ecotourism	24
C. Protected Areas	25
1. Protected Terrestrial Areas	25
2. Coastal Protected Areas	26
3. Marine Protected Areas	27
D. Non-Protected Areas	27
E. Frequency of Visitors and Areas Most Visited	28
F. Institutions, Standards and Planning	28
1. Organizations involved in Ecotourism	29
2. Criteria for Regulating Tourism and the Environment	29
3. Planning	30
G. Current Status of Ecotourism	30
1. Priority Requirements	30
2. Local Facilities and Experience in each country for Training in Ecotourism	31
3. Achievements and Failures of Ecotourism	32
III. Case Studies	33
A. Netherlands Antilles: Bonaire	33
1. Ecotourism in Bonaire - Summary	33
2. The Case of Bonaire	33
a. General Description of the Island	33
b. Protected Areas	34
i. Bonaire Marine Park	34
ii. Other Protected Areas	36
c. Environmental Considerations	37
d. Tourism in Bonaire	38
i. Main Attractions	38
ii. Underwater Tourism	39
iii. Visitor Arrivals	40
iv. Tourism Incentives	42

TABLE OF CONTENTS (contd.)

	Page
B. Costa Rica	42
1. Ecotourism in Costa Rica - Summary	42
2. The Case of Costa Rica	45
a. Protected Areas	45
b. Environmental Considerations	49
c. Tourism in Costa Rica	50
i. Background	50
ii. Visitor arrivals	52
iii. Tourism Incentives	54
C. United States Virgin Islands, St. John	55
1. Ecotourism in the U.S. Virgin Islands and in St. John - Summary	55
a. Ecotourism Council	55
b. St. John	56
2. The Case of St. John and the U.S. Virgin Islands	57
a. General Description	57
b. Protected Areas	57
c. Environmental Considerations	59
d. Tourism in the Virgin Islands	61
i. Limitations and Outlook	61
ii. Visitor Arrivals	62
iii. Hotel Statistics	63
iv. Tourist Preferences	64
v. Tourism Incentives	64
V. References	65
a. Suggested Reading	67

ANNEX I - LIST OF TABLES

	Page
Table 1: Macroeconomic Impact of Tourism, Hotel Capacity and Annual Visitor Arrivals	1
Table 2: Ecotourism: Concepts and Definitions	2
Table 3: Protected Terrestrial Areas	4
Table 4: Coastal Protected Areas	6
Table 5: Marine Protected Areas	8
Table 6: Non-Protected Areas	10
Table 7: Visitor Arrivals	11
Table 8: Legal and Institutional Aspects	13
Table 9: Planning	14
Table 10: Bases for the Development of Ecotourism	15
Table 11: Protected Wildlands in Costa Rica	17
Table 12: International Tourist Arrival in Costa Rica according to Zones and Countries - 1989-1991	18
Table 13: International Tourist Arrivals in Costa Rica according to Zones - 1992-1991	19
Table 14: Tourism in Costa Rica and Visits to National Parks	20
Table 15: Tourist Indications for the U.S. Virgin Islands - 1980-1991	21
Table 16: Main Hotel Statistics - 1987-1990	22
Table 17: Visitor Preference - 1989	23

SUMMARY

Background

This report is one of a number of ecotourism related activities being undertaken by the Regional Coordinating Unit of the Caribbean Environment Programme within the framework of the United Nations Environment Programme.

The Action Plan of the Caribbean Environment Programme for the biennium 1992-1993, approved by the Ninth Meeting of the Monitoring Committee of the Programme held in Kingston in June 1991 and endorsed by the Sixth Intergovernmental Meeting of the Caribbean Environment Programme in Kingston in November 1992, included the study entitled "Assessment of the Competitiveness of Ecotourism in the Wider Caribbean Region".

Given certain constraints on financing for the activity, the Regional Coordinating Unit decided to undertake a preliminary phase of the study, different in scope from the original.

It should be noted that a previous report entitled "Results of a Survey of Focal Points of the Caribbean Environment Programme", dated April 28, had been submitted to the Regional Coordinating Unit of the Programme. That report contained the results of the survey - based on eleven responses - and is the source of a large portion of the synthesis chapter of the present report.

Methodology and Scope of the Study

The objectives of the study are in short, to ascertain the present status of ecotourism in the States and Territories of the region, to clarify the scope of the concept and propose general guidelines for the appropriate development of ecotourism in the coastal and marine areas of the region. The analysis is aimed at an interpretation of ecotourism in its present form - as it is understood by the national and territorial authorities who were consulted, and to offer some preliminary proposals in this regard.

The basic method proposed for achieving these objectives was that a survey be carried out among the States and Territories of the Wider Caribbean Region - by means of a formal poll of the focal points of the Caribbean Environment Programme - with consultation with various organisations, followed by analysis and research on the peculiarities of ecotourism in the States and Territories selected.

The questionnaires ~~were forwarded~~ to the Focal Points of the Caribbean Environment Programme; fourteen States and Territories responded. Although case studies had originally been planned for five States and/or Territories these had to be reduced to three. St. John in the United States Virgin Islands, Bonaire in the Netherlands Antilles and Costa Rica in Central America. On-site data collection took place in January of 1994.

As soon as the questionnaire was sent out and responses began to come in, weaknesses of format were detected in terms of coverage - other questions should probably have been included - and in terms of the formulation of the questions which gave rise in some cases to different interpretations of the same query and consequently to responses which could not be compared. Further, the focal points of the Caribbean Environment Programme were not capable of dealing with all aspects of the survey and in many cases sections of the questionnaire had to be distributed to various departments. This created difficulties in putting the document back together which in turn caused focal points to return the questionnaire late or hand in incomplete documents.

A global analysis was made even more difficult by the fact that so few responses were received and from very diverse States and Territories. It was nevertheless possible to arrive at an interesting conclusion concerning certain specific topics.

The following countries responded to the survey:

- Antigua and Barbuda
- Bahamas
- Barbados
- Belize
- Colombia
- Costa Rica
- Dominican Republic
- Guyana
- Martinique
- Mexico
- St. Vincent and the Grenadines
- Surinam
- Turks and Caicos Islands
- Venezuela

The results of the survey are set out in tables to be found in Annex 1 of the report. Completed questionnaires were submitted to the offices of the Regional Coordinating Unit in Kingston.

Even if, in some cases, the figures and background information provided in the questionnaires seem inconsistent or incorrect, they are included in the tables and analysis without any interpretation or modification. In some cases however it seemed wise to make certain

observations, whether as footnotes to the tables or as part of the analysis. The structure of some tables required that some specific responses be summarised without altering the original information.

The three cases selected for field research - Bonaire, Costa Rica and St. John - are unique in that, in all three cases, tourism is of significant economic importance and also closely linked to protected areas. In addition, these three States and Territories have projected to the rest of the world the image of specialists, if one may use the word, in nature tourism.

Finally, in all three cases, conscious efforts are being made to expressly incorporate elements of ecotourism, in the sense given to the expression in this report, into the management of their protected areas.

There are however important distinctions among the three cases. Costa Rica is a sovereign republic with a relatively small though growing dependence on tourism. Bonaire is a very small island with some measure of autonomy in the management of its internal affairs forming part of the Netherlands Antilles, an autonomous regime linked to the Kingdom of the Netherlands. Bonaire specialises in underwater tourism activities. St. John is also a small island and is a part, along with St. Thomas and St. Croix, of the United States Virgin Islands. The Virgin Islands National Park is located here and it covers the greater portion of the island. This park is a major tourist destination among the protected areas of the Wider Caribbean Region.

The research methodology - heavily influenced by the length of time spent in each country or territory, two to three working days - was confined to interviews based on a prepared outline with persons directly or indirectly involved in ecotourism, and collection of written material on ecotourism and related topics. The persons interviewed were basically those selected by the focal points of the Caribbean Environment Programme in each of the chosen cases. All visits took place in January of 1994.

Structure of the Report

The presentation of the survey results and the field research findings is supplemented by a synthesis chapter divided into three sub-chapters the first of which covers the scope and definition of the concept and associated activities. The second sub-chapter covers the main conclusions of the research with a fairly free interpretation of the responses to the survey on ecotourism and of observations on the three cases studied. These conclusions emerged from the documents obtained and from comments made by the persons contacted all of whom are identified in the report. The third sub-chapter offers guidelines for the development of ecotourism in the States and Territories of the region.

This synthesis can be considered independent in that a reading of it provides an overview of ecotourism both in general terms and as it is practised in the Wider Caribbean Region, without the need to examine the actual results of the survey and field work.

The report is therefore divided into three substantive chapters presented in the following order: synthesis, survey results, case studies.

Finally, there is an appendix and two statistical annexes. The appendix identifies documents consulted, of whatever type, as well as persons interviewed. It includes a third section which constitutes an additional body of documents which, although identified, were not available at the time of writing. The annexes consist of tables containing the results of the questionnaires and statistical tables relating to the case studies.

Note

Wherever there is a direct link between a specific aspect of content and a particular source, or wherever a text is quoted, the name of the author and year of publication of the document or the name of the person providing the basic information is given in brackets. In the case of verbal communications the letters "v.c." appear. All personal contacts were made in 1993.

I. SYNTHESIS

A. *Ecotourism: Scope and Definitions*

1. Initial Considerations

At the conceptual level at least, the term ecotourism is still being used in a general way; its significance and the scope of the activity however are not the same in all instances. On the real, operative level the activities which are likened to the notion of ecotourism sometimes conflict with the actual terms of the definition in scope and meaning. There is on the other hand a dimension to ecotourism which is being imposed by the tourism industry and used as a promotional tool; the trend towards alternative forms of tourism observed in international tourism - in which certain segments of the market which in the recent past, mattered little, are beginning to assume major importance¹ - has led to indiscriminate use of the term. Activities which have little to do with the more restricted, conservationist concept are thus labelled ecotourism.

In any case, this synthesis does not propose to rule out the idea of a form of ecotourism which is decidedly economic or commercial in nature; the idea is to set aside a conceptual category for a type of small scale, conservationist, alternative tourism, which reserves an important role for the community in the provision of certain services and the protection of the area's resources, while being managed by industry agents who will hopefully specialize in handling a particular segment of the market.

It seems also, that certain sectors view ecotourism as an alternative to traditional tourism in terms of its effect on economic development. Even within the widest definitions of ecotourism, such a vision is out of place. Emphasis should instead be placed on recognizing the reality of a highly segmented tourist market in which certain segments -- those which place the accent on nature, local cultures, sporting activities, family vacations, etc. -- are rapidly growing and must therefore be given increasing attention when structuring the tourism product of a State or territory. On the other hand the growth of the sector referred to as sun, sea and sand tourism, made popular by the large all-inclusive resorts, is expected to slow down. To a certain extent however, the two types of tourism are not in competition and may even complement each other.

It may be posited that alternate forms of tourism are possible for a particular protected area. There is the option of ecotourism in the narrow sense, the conservationist option; there is also the option of large scale nature tourism. There

1 Attention should be focused on the results of a survey of travel agents in the United States on trends in tourism for 1993; 69% of the agents expected growth and it was revealed that the types of vacations most requested were, in order of importance: short holidays, special interest, nature, adventure, sports, culture and others. On the other hand, a study by the Interamerican Tourism Institute entitled "Análisis del motivo de compra" ("Analysis of Purchasing Patterns") identified 275 market segments (Arzola, 1992).

can then be some measure of competition between the two options. In the case of unique protected areas where there exists a monopoly or near-monopoly in the sense that there are no nearby substitutes for the particular area or resource, the decision will depend on the fees for entry to the protected areas and regulations regarding the number of visitors. Where visitor numbers are unrestricted and entry fees low, tourism will tend to intensify; where numbers are restricted and entry fees higher, tourism will be more selective, confined to visitors who attach a higher value to the ecosystem or protected resource in question.

Tourists and the industry itself will reap all the benefits offered by the particular area; tourists, because they will be paying only a fraction of the value which they themselves attach to the enjoyment of the area being visited, would in economic terms be receiving a large "consumer excess"; as would the industry, because in making use of the protected area or resource, it receives more benefits than it needs in order to make a satisfactory profit. It may be said that when the government, which is the representative of the society and owner of natural resources, does not charge for entry or charges too little, it is giving away its products; it is also risking the deterioration of the area by allowing overloading if it sets low entry fees or does not use some other mechanism to limit the number of visitors²

If one wishes to view ecotourism as an engine for economic development, it must be borne in mind that even if one acknowledges the fact that economic growth and environmental protection can be compatible within a plan for sustainable development, they must be recognized as conflicting objectives. The commercial objective of ecotourism in its widest conceptual formulation is sure to be at odds with its conservationist objective.

In approaching the matter of expansion or support of ecotourism it is appropriate to consider two alternative visions - partly interchangeable, partly complementary - which may be represented by the following propositions:

(1) Ecotourism should be expanded:

- to generate high levels of foreign exchange, employment and national income;
- to offer to the tourist different possibilities from those offered by other destinations; and
- to finance activities for the conservation of the resources.

² These two paragraphs are based on unpublished statements by Lindberg (1991).

- (2) Ecotourism should be seen as a fast growing activity capable of threatening the conservation of protected natural resources; it must therefore be restricted and regulated with a view to protecting the natural resources of the areas in which it is practiced.

2. Definitions

a. Ecotourism

The following paragraphs present interesting definitions which are to be found in the literature. This is done to offer a frame of reference of sorts to readers of this report who are not yet fully aware of what ecotourism is.

One definition of ecotourism which has become popular judging from the frequency with which it has been reproduced in the specialized literature is that of Ceballos Lascurain (1987) which states, more or less, that ecotourism consists of trips to relatively undisturbed, unpolluted natural areas for the specific purpose of studying, observing or enjoying the surroundings and wild life as well as any manifestations of past or present culture to be found in these areas.

A definition which is more extensive and emphasizes a developmental perspective is that proposed by the Hon C.A. Maynard, Dominica's Minister of Tourism and current President of the Caribbean Tourism Organization at the First Caribbean Conference on Ecotourism, held in Belize in 1991. He suggested that ecotourism could be defined as a type of tourist development geared towards the development of natural historical, cultural and social structures in harmony with the physical environment, land use and cultural characteristics to ensure sustainability in the sense of preservation for future generations.

Jean S. Holder, currently Secretary General of the Caribbean Tourism Organization made reference, at the same conference, to those factors which must ultimately be a part of any definition of ecotourism and which consequently must be a part of the activity itself. The factors to which he referred are the following: responsibility of travel agents and travellers to appreciate the fact that certain things have value, obligation to the country, its people and its way of life; honesty in terms of the product being offered; consistency in the sense of offering an enjoyable vacation coupled with education about what the traveller is seeing and enjoying and its worth; involvement in the sense of interaction in a context of mutual benefit and respect.

Ruth Norris (1992) asks the question: what is ecotourism and how does it differ from nature tourism or adventure tourism?³ For her, neither nature tourism nor adventure tourism can be equated with ecotourism, not as long as they fail to foster greater protection of the environment. She points out that for at least two decades conservationists have been aware of the fact that the great expansion of nature tourism and adventure tourism is in itself a threat to natural areas. She concludes that to constitute "ecotourism", tourism must be linked to resource protection; she adds that if its purpose is to be of benefit to natural areas instead of being another mechanism for extracting utility from them, then the challenge to ecotourism is to guarantee meaningful benefits for local populations.

An apt and possibly more technical definition is that proposed by the Corporación de Turismo de Venezuela (Tourism Corporation of Venezuela) which states that "ecotourism involves low density, low impact activities in natural areas of sufficient biological, cultural and geographic interest to attract tourists."

The criticism has been voiced that "eco" seems to exclude other options for alternative tourism such as cultural tourism, adventure tourism, archaeological tourism etc... A more generic expression which would place the accent on the environmental rationality of recreational and tourism activities is "environmentally correct alternative tourism".

b. Ecotourists

Various classifications for ecotourists have been proposed, based on levels of commitment to conservation or willingness to forego comforts out of a desire to discover areas or resources which are difficult to access. Below is the Lindberg (1991) classification which identifies four types of ecotourist.

Researchers and Specialists: Scientific researchers, participants in tours specially designed for education, waste collection and similar activities.

Committed Ecotourists: Persons who travel out of a specific interest in seeing protected areas and a desire to understand the natural and cultural history of the area.

3 Ruth Norris in "Can Ecotourism Save Natural Areas?", article published in National Parks, January/February, 1992, United States.

Average Ecotourists: Persons who visit for example the Amazon, the gorilla reserve in Ruanda or other destinations mainly out of a wish to take a trip which is out of the ordinary.

Occasional Ecotourists: Persons whose contact with nature is fortuitous, arising out of a trip made for other reasons.

Laarman and Durst (1987) developed a simpler classification which distinguishes between seasoned ecotourists and dilettantes according to the level of the physical rigours to which the tourist is subjected or the extent of his interest in nature.

This typology demonstrate the diversity of the situations existing in the nature tourism market, situations which must be considered for planning.

Elizabeth Boo in her study of ecotourism in Latin America (1990) emphasizes the difficulty of defining the nature tourist given the large number of activities which may be associated with "nature". For the purposes of the study the tourists interviewed were classified into three groups: those for whom protected areas were the main motivation for travel, those for whom visits to protected areas were important and those who did not contemplate visits to protected areas or for whom such visits were of secondary importance in the decision to travel. 46% of those surveyed fell into the first two groups.

B. Analysis and Conclusions

The following paragraphs set out some considerations based on a free interpretation of the results of the survey and case studies, some of which are dealt with later.

1. The Practice and Concept of Ecotourism

It should be noted that the questionnaire was deliberately formulated in such a way as to provide no definition of ecotourism to which persons responsible for completing it could refer. The point of reference is therefore the focal point's own interpretation of the meaning of the term or the scope most often attributed to it, or some official definition of the term.

The fourteen responses to the questionnaire demonstrate that in the States and territories involved, some tourist activity takes place which may be associated with the concept of ecotourism, more so to the concept implicit in the body of responses received than to the definition expressly adopted. Apart from a few

exceptions there is no distinction made between analogous expressions such as alternative tourism, ecological tourism and others. In the three case studies, generally speaking, whenever a significant portion of tourism activity involves nature, in so far as it takes place in national parks, government and industry authorities consider what is done there to be ecotourism.

In general, the express formulation of the concept of ecotourism is of an activity centered on the observation and enjoyment of nature; some see it as specially linked to national parks and other types of protected areas which still offer unspoiled environments. In some responses ecotourism was seen as an "educational - recreational, small scale, controlled, directed" activity, or as an activity which should be accompanied by a "programme of environmental interpretation and/or education". In other responses the concept was viewed in wider terms, embracing elements such as "study and preservation of the natural wealth of the country". Others include ideas such as enjoyment and study of "cultural expressions" or the requirement of an "understanding of the cultural history" of the site. Several responses emphasize the economic benefits to be derived by local populations which would serve as an incentive to conservation of protected areas or other aspects of nature as well as diverse cultural expressions. Finally, some responses included activities such as underwater sports and water sports as well as activities such as golf and horseback riding.

Despite greater or less emphasis on certain factors, there are many elements common to all or a large number of the definitions found in the literature. If one were to propose a definition which would bring together the elements most often included in survey responses, one would no doubt produce a definition very similar to those used or suggested by some of the leading organizations and outstanding writers in the field.

One can however detect a contradiction if it may be thus described, between the conceptual level and the operational or real level, levels which may be likened to extreme positions on the question of the definition of the scope of ecotourism. Indeed, generally speaking, at the conceptual level, the level of definitions, ecotourism is viewed as a somewhat restricted activity, subordinated to the requirements of conservation, oriented towards education and culture, with benefits which should be limited to local populations.

At the level of reality, on the other hand, the view of ecotourism emerging from the responses to the questions asked and from what has been observed, is one of an economic development strategy based on natural resources in which, even if the conservation factor is not ignored, it is not a conditionality and it may precede, follow or be contemporaneous with the exploitation of resources through tourism. This view is especially obvious whenever ecotourism is linked to mass utilization of particular natural resources. The distinction mentioned

above between forms of ecotourism and their link to segments of the market with which they are associated is relevant here.

Earlier references to the implied and express forms of ecotourism correspond to these levels.

The contradiction becomes more obvious in the case studies in which persons closely associated with the management of protected areas and with government units for the protection of the environment reveal their disquiet at the intensification of tourism in protected areas and at tourist overload in these areas and show skepticism regarding the likelihood of conserving unprotected areas where there exists the possibility of profitable expansion of traditional tourism. These persons are of the opinion that the tourism practices which have been developing in the cases they represent are not in keeping with the concept of ecotourism.

It should be pointed out in any case that in Bonaire, Costa Rica and the United States Virgin Islands serious efforts are being made to protect national parks, reserves, sanctuaries etc in an attempt to rationalize tourist activity for conservation.

2. Significance and Impact of Tourism

The results of the survey demonstrate the difficulty, as revealed in responses to the questionnaire, of establishing objective linkages between the development of tourism and its contribution to the national economy and between tourism and ecotourism. The field research yielded no records of such relationships. Despite this, some observations arising from analysis of the survey results will be mentioned.

The answers provided by those surveyed concerning the relative contribution of tourism as a sector or sub-sector of the economy to gross domestic product, employment and foreign exchange earnings, revealed no homogenous patterns among States or territories grouped by characteristics: large continental countries; medium-sized countries; small islands. Bearing in mind the relatively uniform levels of development in the sector, one would expect that the contribution of tourism to the variables selected would be in inverse proportion to the size of the country - given the more diversified economies of the large countries of the region and the greater dependence on tourism in the smaller islands - but no such pattern emerged. There does however seem to be some correspondence in the behaviour of the three indicators chosen.

The differences between these figures could be indicative of the importance of tourism in each State or territory however it says nothing about their importance in international terms as tourist destinations. The number of rooms and the annual number of visitors are absolute figures and provide an indication of the relative importance of the country or territory as a tourist destination in comparison to alternate destinations.

The average hotel occupancy rate may be seen as indicative of traveller preference, probably attributable to relatively lower prices (hotels or packages) and not to the available attractions which, particularly in the case of island States and territories are scarcely distinguishable. Occupancy rates, combined with other elements, could be an indicator of competitiveness.

It is therefore both appropriate and important to emphasize the risks involved in attaining a highly competitive position by means of low development and operational costs which are the result of controlling authorities' tolerance of environmental degradation or of the lack of environmental regulations and standards to protect natural resources (pollution, tourist development detrimental to surroundings, destruction of coastal resources, tourist overload in protected areas etc.) Artificial competitiveness gives rise to environmental degradation and depressed salaries when faced with the true competitiveness which only becomes possible with improvement in the quality of the product and more efficient operation. This in turn results from rational environmental management and the incorporation of technical advances into tourism activity.

As regards the relationship between ecotourism and tourism, given the breadth of the implied concept of ecotourism discernable from the survey responses, a concept with strong links to traditional tourism, it is reasonable to think that one factor which will contribute to comparatively greater development of the activity is the development already achieved by traditional tourism. In other words, it is submitted that the present development of traditional tourism will determine the future development of ecotourism, in comparative terms. The greater the number of tourists arriving in a particular State or territory the greater the possibility of involving larger numbers of tourists in ecotouristic activities. One very important complementary factor is the availability and adequacy of protected areas reserved for such activity. This question will be dealt with below.

3. Ecotourism and Protected Areas

a. Importance of Protected Areas

Although strictly speaking, neither national and territorial statistics nor survey responses reveal the real importance of ecotourism in terms of the number of ecotourists or the ratio of ecotourists to total number of tourists, the development of ecotourism can still be linked to the number of protected natural areas. It is in fact noticeable that the greatest increases in the practice of ecotourism occur in those countries having the greatest number of protected areas. However, neither the size of the protected areas nor the proportion of such areas made available for ecotourism necessarily implies better use of ecotouristic resources or greater development of the activity. There are factors such as development of and access to protected areas which may determine the number of visitors.

According to the definition of ecotourism suggested by some survey responses and observed in personal interviews, ecotourism consists of visits to protected areas. As few responses mentioned the number of visitors, a comparative analysis in terms of the objective relationship between ecotourism and protected areas was not possible. However, the cases studied, Bonaire, St. John and Costa Rica, are important in that conscious efforts have been made to develop tourism through relatively wide extension - in proportion to total size of territory - of protected natural areas. A large proportion of the tourists who come here visit protected areas.

As was pointed out above, a second determining factor in the development of ecotourism is the extension of protected areas to the maximum possible extent, subject to appropriate management schemes within the context of promotion of such resources.

It should be noted that, from a conservationist point of view, the creation of protected areas is a useful mechanism for regulating the use of resources and protecting them in areas which are the focus of intense tourism activity, namely, marine and coastal zones where enforcement of environmental regulations is difficult.

b. Capacity of Protected Areas

Ecotourism, in its widest interpretation, can be and in fact is destructive except where precautions are taken to prevent this.

There are useful technical concepts for assessing the recreational potential of an area or resource. One of these is the tourist carrying capacity or tourist capacity of the area. The tourist carrying capacity of an area is the maximum number of visitors who can be accommodated over a particular period without adverse effects on resources or on services while at the same time providing a high level of visitor satisfaction. This concept is linked to that of tourist pressure which is the number of visitors an area can accommodate at any one time during a particular season, given the same constraints: minimum negative impact and maximum satisfaction. Another concept, not fundamentally different from the first, is that of acceptable visitor load which is the number of visitors sustainable over time.

It must not be forgotten that these concepts are merely planning tools that inform and invite management decisions which, one logically expects, will be subject to a number of different considerations. It should on the other hand be recognized that tourist carrying capacity is relative and dynamic because it is determined by changing circumstances and depends upon variables which cannot always be objectively assessed. One has to bear in mind finally that the carrying capacity of an area must be fixed in accordance with objectives which depend on the manner in which the protected area is managed. This determines the use to which a given area may be put. (Cifuentes, 1992)

The conservation or degradation of an ecosystem or a particular resource depends upon the relationship between number of tourists per unit of time - visitor load -and the level of protection given to the ecosystem or resource. A certain measure of degradation can result from the combination of few tourists and a low protection level or many tourists and a high protection level. Thus the carrying capacity or acceptable visitor load of an area will vary with the level of protection provided through restricted entry and/or protection mechanisms.

The question of capacity of protected areas - crucial to any expansion of nature tourism - is one which has been under examination for many years. This issue is dealt with in a recent publication of the Centro Agronómico de Agricultura Tropical de Investigación y Enseñanza (CATIE) which outlines a methodology for assessing the capacity of a particular area (Cifuentes, 1992). There are however few protected areas for which a definite carrying capacity has been fixed and even fewer which have managed to prevent overload by regulating visits.

In the administration of specific protected areas very diverse criteria have been applied to regulate visitor load through combinations of protection levels and

visitor numbers. In Costa Rica, as a result of situations of perceived overload, studies have been undertaken to systematically ascertain the carrying capacity of the areas most frequently visited. In the interim, working from visitor load limits established through past experience, efforts are being made to exercise some control over visitor load by increasing protection - for example by prohibiting camping in certain parks - or by reducing the number of visitors to these parks through procedures which include agreements with the industry. In the case of protected areas under private management (non-governmental organizations), daily visitor limits have been set.

In Bonaire where studies have been carried out on the carrying capacity of the marine park in terms of the number of divers, setting the limit, for the level of protection provided, at approximately the number of divers now holidaying on the island, efforts have been made to control the number of these visitors. The aim is to increase protection, in particular by training operators and by regulating their activities.

No studies on carrying capacity have been done in St. John but the park administration estimates that the present number of visitors cannot be increased unless new regulations are introduced. There is no direct control over the number of visitors to the park; conservation has taken the form of various protection measures, financing for activities taking place in the park and restrictions on the size of cruise ships permitted to anchor in the vicinity of certain beaches. The desire to protect certain areas has at times led to overloading of others, this is the concept of "sacrificial areas".

4. Context and Status of Ecotourism

a. Institutional Factors

On the topic of institutions, States and territories directed their answers to survey questions at identifying organizations responsible for or interested in the tourism sector and environmental conservation; organizations supposedly responsible for ecotourism. However, the impression created by the wide ranging data requested and received is that these organizations rather than being actively involved at the moment in the study, promotion and regulation of ecotourism have a "potential" role to play in ecotourism which sooner or later will cause them to become involved in such activities.

This does not mean that there are no public or private sector organizations currently handling these matters. The body of organizations identified is now carrying out some activities in relation to certain forms of ecotourism. These

are, on the one hand, organizations responsible for the administration of protected areas which are in almost direct contact with large groups of tourists wishing to visit these areas and on the other, various national, non-governmental organizations and travel agencies which in some cases come together to form advisory bodies such as for example the Ecotourism Council of the United States Virgin Islands.

One may however conclude that with the exception of matters concerning the use of protected areas for tourism, the treatment of ecotourism is still confined to the conceptual level.

b. Approach to Planning

Most of the States and territories which responded to the survey provided information on the diverse initiatives which seek to integrate environmental protection, tourism and ecotourism on various levels. This was also observed in the three case studies.

It was generally made clear that where attempts are made to include environmental conservation in the management of development, ecotourism is almost invariably a component of the initiative. There are few plans for management of protected areas or land use and few regional or local development projects which do not include ecotourism. Further, with increasing consideration of environmental matters in public administration at the operational level, ecotourism is perceived as an important tool for reconciling conservation and growth. This is a proposition that, at the conceptual level at least, gives rise to no conflict. It must however be emphasized that in many of these cases large scale tourism in protected areas is being equated with ecotourism, creating the impression that the conflict between large scale tourism in protected areas and conservation or alternative uses does not exist or that it is minimal or easily resolved.

c. Priority Requirements

Among the range of factors which could contribute to the development of ecotourism, the States and territories participating in the survey emphasized as first in the order of priorities the need for infrastructure, qualified staff and an institutional framework; also high on the list, though at a secondary level, are factors such as hotel facilities and legislation; and finally incentives, transport, communications and information.

It is unclear, from the factors given priority, whether the survey subjects were thinking of ecotourism as currently practiced or as they hope to see it practiced in their States and territories; in other words, the responses do not make it clear whether the approach is that of large scale ecotourism focused on natural attractions, protected or otherwise or that of restricted ecotourism, geared towards protection of natural resources, in which local communities play a meaningful role. Either way the priorities set out seem to be more in keeping with the former.

d. Achievements and Failures of Ecotourism

It is clear from some responses that neither the achievements nor the failures associated with ecotourism are yet evident. Others emphasize certain perceptions of the benefits normally associated with ecotourism. Among the deficiencies referred to is a low level of institutional efficiency in the management of tourism. The responses point, finally, to the risks of causing degradation through expansion of tourism beyond the physical carrying capacity of the areas being visited.

In this respect, two factors are worthy of mention. In the first place, given the short history of the activity in the States and territories of the region, the benefits of ecotourism which are viewed as achievements may, in some cases, be more the expression of a hope than actual observation of real achievements. Still, the benefits referred to are, to a great extent, the benefits expected, these are referred to in the literature among real and positive experiences.

Secondly, even if no negative or positive effects of the practice of tourism were noted in some cases, the literature records the negative effects resulting from intensive and prolonged practice of ecotourism in certain areas. Ecotourism is here defined as visits to parks and other types of protected areas.

C. Guidelines for the Development of Ecotourism

The list of references to be found at the end of this document would suggest that a substantial body of literature has been developed, the operative scope of which could facilitate the creation of plans and strategies for developing ecotourism. For this reason and because of the nature of the study undertaken, this report will confine itself to some strategic proposals worthy of expression and attention.

The following questions must first be asked in a deliberate attempt to stimulate a discussion which will serve to clarify the meaning to be given to the word ecotourism:

- * Does ecotourism include large scale tourism in national parks, large scale diving activities in marine parks or in marine and coastal points of interest, as well as sun, sea and sand tourism?
- * Is there a conflict between the growth of ecotourism and the conservation of the natural resources involved?
- * Is ecotourism important as a development strategy or as a conservation strategy? Is the ecotourism phenomenon to be studied with a view to expansion or restriction?

1. Useful References (Documents)

Without detracting from the importance of the other items on the list referred to above, it would be useful to focus attention on certain documents which may be of direct assistance to State or territorial authorities in the region for the development of specific guidelines.

The first documents which government and industry authorities should consult when designing strategies for ecotourism development are the conclusions and recommendations which comprise the synthesis of the presentations and debates of the three Caribbean Conferences on Ecotourism sponsored, to date, by the Caribbean Tourism Organization (CTO) (1991, 1992 and 1993).

Second, mention must be made of the study by the World Wide Fund for Fund "Ecotourism Potential and Pitfalls" (Boo, 1990), which focuses on Latin America and the Caribbean with five case studies, three of which concern countries of the Wider Caribbean Region: Belize, Costa Rica and Dominica. Its conclusions, recommendations and development strategies for nature tourism appear relevant and worthy of consideration in the shaping of national plans and strategies for using protected areas with a view to ecotouristic development.

A second document of great interest is that prepared by a group of experts from the International Union for the Conservation of Nature for the International Tourism Organization and the United Nations Environment Programme, entitled "Desarrollo de Parques Nacionales y Areas Protegidas para el Turismo" ("Development of National Parks and Protected Areas for Tourism") (McNeely, Thorsell and Ceballos - Lascurain, 1992). This document sets out a number of concepts which must be considered to assess the tourist potential of protected areas and design development strategies. Among the aspects of the document which are of particular interest are

a table showing the potential negative environmental effects of tourism on protected areas, a check list for assessing the tourism potential of specific protected areas, a guide for incorporating the tourism factor into protected areas management plans and guidelines for developing tourist facilities in national parks.

A document published by the East-West Center of Hawaii entitled "La economía de las áreas protegidas - Una nueva mirada a beneficios y costos" ("The Economics of Protected Areas - A New Look at Costs and Benefits"), (Dixon and Sherman, 1990) is interesting in that it sets out in a systematic way the economic costs and benefits to be considered when making decisions affecting protected areas. With respect to entry fees and the issue of numbers as they relate to the financing of the management of protected areas, a document published by the World Resources Institute "Políticas para el manejo de áreas silvestres" ("Policies to Maximize the Ecological and Economic Benefits of Nature Tourism"), provides the necessary theoretical and practical foundations for developing a strategy for the financing of protected areas (Lindberg, 1991).

On the question of management of protected areas "Políticas para el manejo de áreas silvestres" ("Natural Areas Management Policies") by Thelan and Dalfeit, published in Costa Rica in 1978, has lost none of its relevance.

"Nature Tourism - Management for the Environment" (Whelan, 1991) published by Island Press, brings together a number of important articles which are general and specific references covering, among other topics, certain ecotourism destinations, participation of local communities in ecotourism projects, commercialization of ecotourism products and recommendations for sustainable ecotourism.

A document on methodology recently published by "Centro Agronómico Tropical de Investigaciones y Enseñanza" (CATIE) under the sponsorship of the WorldWide Fund for Nature (Cifuentes, 1992) is very useful for assessing the tourist carrying capacity of protected areas.

The Corporación de Turismo de Venezuela (Venezuelan Tourism Corporation) has recently published a worthwhile document, wide-ranging in content, which deals systematically with tourism in general and ecotourism in particular in comprehensible diagrammatic style. It is of great interest as a general model of a basic document for promoting ecotourism internally among industry and government agents and for informing discussions on strategic guidelines.

2. Basic Premises

Before turning to specific factors to be considered when formulating strategies, one should take cognizance of some basic premises.

The first to be borne in mind is that, whether planned or not, ecotourism is going to take hold in this region.

The spontaneous explosion of alternative forms of tourism across the region, placing pressure on protected areas and on valuable unprotected ecosystems and resources, is a reality.

Alternative tourism is here to stay in the region and it will continue to develop whether national and territorial authorities have anything to do with it or not. Given the differing definitions of the concept, ecotourism and its variants form part of a growing segment of the tourism market which for agents, is creating its own opportunities, challenges and obligations, none of which has anything to do with national promotion strategies. This does not mean that the product offered to visitors in the various States and territories of the region cannot be made more or less attractive so as to encourage, particularly in the medium term, smaller or larger numbers of ecotourists. The private sector of the industry will, in any case, determine local dynamics.

The second premise to be considered is that ecotourism will not by itself save the ecosystems, resources or specific environmental functions which require protection, neither will it necessarily contribute to pulling local communities out of their state of under-development; ecotourism may even become another factor serving to aggravate present processes of environmental degradation - new forces for negative environmental change may be unleashed through ill-conceived forms of ecotourism. Mechanisms must therefore be devised to maximize the expected benefits of these activities while minimizing the negative environmental impact of ecotourism.

It is for this reason that regulations governing the use of protected areas and the management capacity within national protected areas systems are important, as are the mechanisms being developed to allow local communities to benefit from tourism.

A third premise points to the need for open recognition of the fact that, in the final analysis, the private sector of the industry is the true catalyst of tourism.

There are two main areas to be considered: on the one hand, environmental conservation and protected areas development; on the other, promotion and development of environmentally sustainable tourism. In both areas, and without prejudice to the role of the public sector, the private sector, both business and non-profit (non-governmental organizations), must be actively involved.

The fourth premise emphasizes the role of government without detracting from the importance of the foregoing premise. It must be borne in mind that only government can represent the long term interests of the society. The free market is unfit to properly perform this function because of its own imperfections, the fact that environmental resources are public property, the externalities involved in consumption and production activities, imbalances in the functional and geographic distribution of wealth and income and the often negative implications for future generations of decisions made today.

What is needed is an approach which embraces the tendency towards a decentralized, non-interventionist public sector which will delegate responsibility for cultural and natural heritage to social intermediaries and to a more dynamic, imaginative private sector, operating under clearly defined medium and long term rules which will facilitate empowerment and development.

3. Some Strategic Proposals

As was indicated at the beginning of this chapter, proposals will be few so as to minimize duplication of the abundant literature being produced in the field.

The first proposal deals with the management of protected areas. There is a need to regulate the use of protected areas now under increasing pressure with the development of that new segment of the industry which targets those interested in alternate forms of tourism. The environmental impact of ecotourism is basically a question of overload - the extent to which the number of visitors exceeds the receptive capacity of the target ecosystem. This leads to changes in the cycles of the ecosystem including the habitat of flora and fauna and eventually to the destruction of the ecosystem or of certain unique resources. Protected areas have to be assessed to determine which of them can be used for purposes of tourism and to what extent, and which cannot be used in this way.

A second proposal relates to the fees for access to protected areas. The authorities should place a value on protected resources in terms of visitor potential, harness visitor spending power through entry fees for protected areas and use these resources to finance the management of these areas. One may consider different rates for visitors of different origin (national or international), rates varying by season, "passports" for access to all the protected areas in the country over a particular period or other strategies. Rates or fees should not only cover direct administrative costs but should include an amount to cover the value of the resource involved, biodiversity, biotic resources, geological formations etc. This amount

would be determined by the relative scarcity or the uniqueness of the resource in question. (See Lindberg, 1991)

A third proposal concerns the role of the private sector - profit or non-profit making - in the management of protected areas for the purpose of tourism. Non-governmental organizations can take full responsibility for managing protected areas. There have been many such very positive experiences in various States and territories of the Wider Caribbean Region (Costa Rica, Netherlands Antilles, Dominican Republic etc.). Further, even where a particular protected area is directly managed by some State entity, certain associated services, such as cafeterias, internal transport, beach facilities, camp sites, hotels etc. may be provided on a concession basis by the private business sector.

A fourth proposal points to the need to identify non-protected areas which can be developed into ecotourist attractions as either public or private protected areas, with a view towards improving the range of ecological choices within the national protected areas system as much for their intrinsic value as ecosystems - the species of flora and fauna found there, the geological formations present - as for their historical or cultural value, or with a view towards recovery of natural or man-made economic resources that have been subjected to serious degradation. In such cases, ecotourism could provide justification for singling out areas which are threatened or subjected to serious degradation so as to introduce special management practices, or it could provide the means to generate the financial resources needed.

A fifth proposal relates to training. The two groups of actors should be educated with respect to the phenomenon of ecotourism. Industry agents should be equipped with an understanding of nature, cultural heritage (biotic resources, biodiversity, geomorphology, anthropological and archaeological factors etc.), as well as of the rules which regulate national protected areas systems and of environmental standards in general. The administrative staff of protected areas on the other hand, as well as the staff of non-governmental environmental organizations should be given a knowledge of the tourist industry and of the tourism market. There is a need for biologists and other professionals involved in the field of ecology to be trained in tourism and thus equipped to handle specialized groups of visitors. At the same time, the normal training given to tour guides should include the areas mentioned above.

The sixth and final proposal deals with regulations for ecotourism. This does not mean that ecotourism itself should be regulated. What must be regulated is the use of protected natural areas intended for ecotourism. Moreover, from an environmental point of view, the most appropriate approach is that which leads to

he conclusion that the tourist industry must also regulate itself to avoid the negative environmental changes which can result from attempts to take advantage of natural and cultural attractions. Strictly speaking, these are not specific regulations for the tourist industry but general ones for all economic activity. Indeed, national regulation should include environmental audits of all existing tourism projects, environmental impact assessment of new projects and financing for the enforcement of existing environmental standards in each State or territory.

However, with regard to regulation of the tourist industry, there is one additional mechanism which must be given priority because it can lead to important positive impacts. These are cooperative agreements between government and industry, in particular the hotel sub-sector, with a view to reducing effluent, reducing or adequately disposing of solid waste, installing treatment plants and rationalizing coastal plans and operations (maintenance of beaches, marinas, etc.).

II. RESULTS OF THE SURVEY

A. *The General Context*

1. Contribution of the Tourism Sector to the Economy

It should be pointed out that the indicators presented here must be treated with caution as national accounting systems do not include accounting procedures which deal adequately with this sector; estimates of the contribution of the tourist sector to macroeconomic aggregates may be the result of different methods of calculation. Comparisons may therefore, in some cases, be subject to discussion. Further, with respect to employment, it may be that the survey itself may have given rise to confusion and it may not be at all possible to compare the responses.

Table 1 of Annex 1 (All Tables are presented in Annex I) sets out the results referred to in the following paragraphs.

a. *Contribution to Gross Domestic Product*

Twelve countries provided information on this question. In five countries this sector accounted for less than 10% of gross domestic product; in four others it contributed more than 10% but less than 15%; in the others, tourism was the source of more than 50% of gross domestic product.

Although one would expect that the contribution of tourism to gross domestic product would be in inverse proportion to the size of the particular country -

given the more diversified economies of the larger countries of the region and the greater dependence on tourism in many of the smaller islands - this variable shows no clear pattern of behaviour, corresponding to types of States or territories, which would allow relative levels of contribution to gross domestic product to be linked to particular groups of States or territories. Thus for the larger countries - Colombia, Mexico and Venezuela - the contribution of tourism to gross domestic product was 1.5%, 3% and 13.1% respectively. Guyana, also a large country though less developed, reported 15%. Participating countries which could be classified as medium-sized - Costa Rica and the Dominican Republic - reported contributions from tourism activities of 7.5% and 11.5% respectively. The Eastern Caribbean islands recorded contributions ranging from 4.6% in St. Vincent and the Grenadines to 60% in Antigua and Barbuda, with 5% in Martinique, 12% in Barbados, 50% in the Turks and Caicos Islands and 55% in the Bahamas.

The percentage contribution of tourism to gross domestic product in each country may be seen as indicative of the importance of this sector in relation to other sectors of the national economy; very high contributions may be a sign of heavy economic dependence on tourism. In Antigua and Barbuda, the Bahamas and the Turks and Caicos Islands tourism bears an enormous burden. In Barbados, the Dominican Republic and Venezuela, where input is greater than 10%, tourism is a fairly important sector. It is relatively important in Costa Rica where it accounts for 7.5% of gross domestic product. For the economies of Martinique, St. Vincent and the Grenadines, Mexico and Colombia, by contrast, this sector is less important - judging from this variable - as it accounts for no more than 5% of gross domestic product.

This indicator does not however reveal the relative importance of tourism activity from an international point of view. Among the States and territories of the Wider Caribbean Region, Mexico, where the tourist sector accounts for only 3% of gross domestic product, is the most important tourist destination, after the United States; Antigua and Barbuda and the Turks and Caicos Islands on the other hand, although generating more than 50% of gross domestic product through tourism activity, are of little importance in terms of their share of the international tourism market. To arrive at a better appreciation of each State or territory's position in the context of regional or international tourism, one must determine the absolute contribution of the sector to gross domestic product in each country.

b. Contribution to Employment

Only seven cases responded to this question according to the terms specified in the survey - percentage contribution to employment. Three of them - the Bahamas, Barbados and the Turks and Caicos Islands - reported that tourism contributed more than 20% to employment. For St. Vincent and the Grenadines, Martinique and Costa Rica the contribution of the tourist sector was 10%, 4.2% and 2.5% respectively.

In Colombia and the Dominican Republic 130,000 and 50,000 jobs respectively, were directly created by tourism.

Apart from an apparent qualitative correspondence with the responses concerning contribution to gross domestic product, there was no information pointing to objective conclusions.

c. Contribution to Foreign Exchange Earnings

Eight of the States and territories responding to the questionnaire did not deal with this question, these were Antigua and Barbuda, Belize, Guyana, Martinique, Mexico, Surinam, Turks and Caicos Islands and Venezuela. The

figures given by those States and territories which did respond confirmed the importance of the sector to foreign exchange earnings.

Figures given for foreign exchange earnings ranged from 25% for Costa Rica to 75% for the Bahamas with St. Vincent and the Grenadines reporting 35%, the Dominican Republic 45% and Barbados 60%.

Finally, Colombia and the Dominican Republic recorded annual foreign exchange earnings from tourism of 440 million and 1200 million American dollars respectively.

2. Hotel Capacity and Number of Visitors

Information was requested on the number of rooms, occupancy levels, annual number of visitors and number of all-inclusive resorts. Results are given in **Table 1** they demonstrate the relative importance of tourism for the States and territories which participated, as tourist destinations, in the survey.

a. Number of Rooms and Occupancy Levels

Responses fell into clear categories. At the highest level was Mexico with 150,000 rooms, followed, though not closely, by Colombia with a little over 43,000 rooms; next in line were Venezuela and the Dominican Republic with between 25,000 and 30,000 rooms, the Bahamas and Costa Rica with about 13,000 rooms each, Barbados and Martinique between 6,000 and 7,000, Belize almost 3,000 and Guyana, St. Vincent and the Grenadines and Turks and Caicos with a little over one thousand rooms each. Antigua and Surinam provided no information on this topic.

Hotel occupancy levels ranged between 40% and 69%. Guyana with 40% occupancy was well below the other participating cases. Barbados, Costa Rica and Turks and Caicos reported 50% occupancy; the Bahamas, Colombia, Martinique and Mexico fell between 54% and 56%, while Venezuela and the Dominican Republic recorded 68% and 69% respectively. The other cases provided no information on occupancy levels.

Higher occupancy levels may be seen as indicative of traveller preference, attributable no doubt to lower hotel rates and possibly cheaper tourist packages. If this is so then occupancy levels may be considered an indicator of competitiveness on the tourism market.

b. All-Inclusive Resorts

The purpose behind the survey item - number of all-inclusive resorts - was to elicit information about a specific category of tourism generally considered to be the exact opposite of ecological tourism. However, as the responses to the specific survey question, of which there were eight, seemed to give different interpretations, they were of no assistance.

The informants in three cases - Barbados, Colombia and St. Vincent and the Grenadines - reported that there were no all-inclusive type hotels. Costa Rica has 192 tourist centres of which 10% were classifiable as all-inclusive. Mexico has 43 such resorts, Guyana 10, Antigua and Barbuda 6, the Bahamas 7 and Turks and Caicos only one.

c. Visitor Arrivals

The following figures for annual visitor arrivals were extracted from the responses received (figures are rounded):

Antigua and Barbuda	194,000	86,000*
Bahamas	3,600,000	1,600,000*
Barbados	394,000	105,000*
Belize	215,000	116,000*
Colombia	856,000	
Costa Rica ⁴	580,000	377,000*
Martinique	751,000	409,000*
Dominican Republic	1,100,000	
St. Vincent & Grenadines	155,000	97,000*
Turks & Caicos	56,000	
Venezuela	598,000	244,000*

* high season

It must be borne in mind that the relationship between the annual number of visitors and the number of rooms may vary. No pattern could be observed on which to base any type of analysis.

⁴ The discrepancy between this figure and the one given for Costa Rica in the case study section may be explained by the inclusion or exclusion of the "excursionist" (cruise ship passenger) category and/or the year of the statistics or the source of survey responses.

B. Ecotourism

This section of the survey is aimed at establishing whether or not ecotourism is practiced in the country or territory in question, what definition is given to this concept, whether there exist similar tourism activities identified by another name and what restrictions could have halted initiatives towards developing this type of activity in cases where it could have taken place. Concepts and definitions are presented in **Table 2**

Almost all the responses received offered concepts and definitions. Generally speaking, the answers revealed that ecotourism and ecological tourism are synonyms. Only in the case of Costa Rica is there a distinction - ecotourism is seen as the commercialization of the concept of ecological tourism. In its response, the Dominican Republic makes a few minor distinctions between ecotourism, alternative tourism, ecological tourism and adventure tourism.

The definitions offered include various elements: among those worthy of mention are the following. Ecotourism is defined generally as an activity centered on the observation and the enjoyment of nature. Others see it as linked exclusively to national parks and other types of protected areas where there is still an untouched environment. It is defined as an "educational-recreational activity that is organized, controlled and small-scale", as an activity to be accompanied by an "environmental interpretation and/or education programme." Other responses expand the concept even further and incorporate into it elements such as "research into and preservation of the country's natural wealth". In addition, in defining the activity, the expressions "any cultural manifestation" and "understanding the cultural history", are also used. In some responses, emphasis is placed on the economic benefits to local populations, thereby providing greater incentives for preserving protected areas and other forms of natural manifestations and cultural expressions. Finally, some responses included sporting activities such as deep-sea diving and other water sports as well as golf and horseback riding.

In the above-mentioned table, the definitions proposed contain many common elements despite greater or lesser emphasis on certain aspects, many of which are already included in more generic definitions adopted by different organizations. Nevertheless, as far as definitions are concerned, there appears to be no major discrepancies between those proposed in the responses to the survey. However, in practice, the perception of ecotourism may vary significantly from one country or territory to another.

However, the question of factors likely to have hindered the development of "ecotourism" activities was not discussed in any of the responses received although

in all cases, activities of this nature were being carried out. In one case, it was pointed out that conditions were not yet appropriate for ecotourism while, in another, all the factors highlighted in the questionnaire had been present at one time or another. These factors include the absence of adequate conditions, a lack of interest on the part of relevant sectors, lack of qualified personnel, insufficient knowledge of the area, lack of understanding of the benefits to be derived from this activity and finally the reduced number of areas with natural beauty which lend themselves to ecotourism and other types of tourism.

C. Protected Areas

1. Protected terrestrial areas

Table 3 presents the total number of existing and planned protected areas, as well as their respective size. This information was given in the answers to the above-mentioned survey.

The fourteen countries which responded to the survey dealt with this question, albeit somewhat superficially with regard to planned areas. In two cases - Barbados and St. Vincent and the Grenadines - it was reported that there were no land-based protected areas even though some had been proposed and, while in four other cases, there were no definite plans to create new ones.

Certain conclusions on ecotourism and its future may be drawn from information presented earlier, on its own, or in conjunction with information gathered from the survey.

It should be stated, in absolute terms, that if the concept of ecotourism is restricted to activities such as excursions, sightseeing or other activities carried out in naturally protected areas, the greatest potential for the development of ecotourism would have to be in those countries with larger areas under protection.⁵ It has been shown that the countries with larger protected areas practice ecotourism on a larger scale: 21 areas of approximately 34,000 km² in Colombia, 6 areas of about 33,000 km² in Mexico and 38 areas of more than 73,000 km² in Venezuela. Belize, with 31 protected areas, reports that ecotourism is practiced in all of them.

⁵ It must be stated, at all times, that there are categories of protected areas where all types of activity should be severely restricted and hence these areas can not be included in the ecotourism potential of a country.

However, neither the size of the protected areas nor the proportion of these areas devoted to ecotourism implies better use of ecotourism, or greater development of this activity. In fact, in Costa Rica, one of the countries where nature-oriented tourism is most developed, ecotourism is practiced in 1,200 km² in 13 of the 27 terrestrial protected areas mentioned in the survey, which covers a total area of nearly 12,000 km².⁶

The main attraction, common to all the States and territories which responded to the survey, and present in the areas where ecotourism is practiced, is nature. However, there are other important attractions in the protected areas open to ecotourism such as cultural, historical, anthropological, archaeological, geological and scientific attractions. In one case, beaches were indicated as an important attraction.

2. Coastal protected areas

The data obtained from the survey on coastal protected areas is presented in Table 4. It should be pointed out that, in some cases, the protected areas defined as land-based include some coastal areas.

In three cases - those of Barbados, Martinique and St. Vincent and the Grenadines - there are no coastal protected areas; all other States and territories claim to have such areas, some of which are devoted to ecotourism. The largest areas were reported in Mexico and Venezuela - each having nearly 30,000 km² - followed by Costa Rica with 5,600 km² and the Bahamas with nearly 2,900 km². The other States and territories have protected coastal areas of between 700 and 1,800 km². Only Barbados and Surinam are considering the creation of new coastal protected areas.

Nature is also the most important attraction in coastal protected areas. The responses are however more specific, especially in terms of the natural attractions which represent a great diversity of ecosystems, fauna and coastal formations. With regard to fauna, avifauna and marine fauna are most prominent, with certain species in abundance, mangroves, coral reefs, beaches, special landscapes and formations; archaeological, anthropological and cultural attractions.

With the exception of the cases of Mexico and Venezuela outlined earlier, the areas in question are small. It is hoped that with the evolution of a Protocol on specially protected areas and wildlife, signed in 1992 by all the States and territories of the Wider Caribbean, will lead to a significant growth in the total size of protected coastal areas.

⁶ Some differences have been noticed in the figures for number and protected areas presented in the survey and those obtained from the case study on Costa Rica. Some of them relate to the distinction between land-based, coastal and marine areas, and others to the management categories; these differences have not been explained.

3. Marine protected areas

Marine protected areas cover an even smaller surface area than coastal protected areas. It is possible that the boundaries between the one and the other is not quite clear; in any event, the distinction between the three types of protected areas that have been discussed is not formally established in any of the cases studied.

The results of the survey can be found in **Table 5**. Eight of the cases studied in this survey provided data on marine protected areas.

Venezuela reported the greatest expanse of marine protected areas with approximately 4,400 km²; this is followed by Costa Rica with 3,100 km², Mexico with 2,300 km² and Colombia with a little under 700 km². At the other extreme, the Turks and Caicos Islands with 31, Antigua and Barbuda with 25, and Belize with 2 km², respectively.

The attractions mentioned are virtually the same as those specified for the coastal zones, except that there is great emphasis on sporting activities such as deep-sea diving and recreational fishing. Also highlighted were the whales in Colombia, and the marine prairies of Venezuela.

D. Non-protected areas

There were very few responses to this question. One observation which could probably be generalized and applied to most of the countries and territories of the Wider Caribbean is that made by Belize which states that ecotourism-related activities take place in almost the entire country and that it would be very difficult to identify all the non-protected areas where this type of activity is carried out.

Table 6 sets out the answers to this section of the survey. Barbados and the Dominican Republic are the only countries attempting to quantify these areas. The former states that ecotourism is practiced in only three non-protected areas; the annual number of visitors has increased to 280 thousand. The latter lists 5 land-based and 7 non-protected coastal areas which are visited by 12 thousand and 304 thousand tourists respectively each year. In both cases, the figures provided correspond to a rather high proportion in relation to the annual total number of visitors to the country.

E. Frequency of Visitors and Areas most Visited

It was only necessary to answer this section of the survey if the section relating to protected and non-protected areas was not completed; the question was not always correctly interpreted.

Seven countries and territories provided no information on the frequency of visitors. Of those that did, only Costa Rica and the Dominican Republic provided some figures.

Costa Rica stated that 280 thousand local tourists and 318 thousand foreign tourists visited protected areas during 1992. The Dominican Republic estimated that some 389 thousand visits were made to areas of special interest such as islands with undeveloped beaches, cays and zones of high biodiversity and outstanding geological formations.

The other cases gave qualitative information on the frequency of visits. In Antigua and Barbuda, the areas most frequently visited were Devil's Bridge and some reefs. Guyana has a number of areas as designated tourist zones which are included in the packages offered to visitors and these are, consequently, the most frequently visited. Martinique points out that the attraction to which most visitors go is the ruins of St. Pierre, a city destroyed in 1902 by a volcanic eruption; the ruins were declared a part of the heritage of mankind. St. Vincent and the Grenadines noted that the areas most frequently visited were those most easily accessible (the Botanical Garden) or most promoted (waterfalls) or exceptionally appealing for excursions (cays). Surinam indicated that the areas most visited were those with natural attractions, indigenous to the country. On the other hand, Venezuela reported that the most frequently visited areas were those developed for ecotourism, the main attraction of which was wildlife, especially avifauna.

The responses to this aspect of the survey are outlined in **Table 7 of Annex 1**.

F. Institutions, Standards and Planning

Tables 8 and 9 present the answers relating to these matters in the survey. None of the States and territories responding to the survey indicated economic policies affecting tourism or related activities, except for Guyana and St. Vincent and the Grenadines where reference was made to the existence of fiscal incentives for the expansion of tourism infrastructure, and Martinique where the economic policies of France apply to the territory.⁷

⁷ Although not mentioned in its answer to the survey, Costa Rica has in effect a tourism incentive law since 1985. Some information is provided on this in the corresponding section of the case study.

1. Organizations involved in Ecotourism

Generally speaking, the questions were aimed at identifying those organizations responsible for or with interest in the tourism sector and in environmental protection. It may be said that these organizations, in addition to being actively involved in the study, promotion and organization of ecotourism, have a "potential" vocation towards this activity which, sooner or later, will cause them to become more involved.

Nevertheless, a number of organizations are already developing activities relating to certain types of ecotourism. They are basically organizations responsible for administering protected areas and have an almost direct link to large contingents of tourists interested in visiting them and to various national non-governmental organizations and travel agencies.

Costa Rica has declared that there are several tourist agencies offering ecological tourism packages. Its National Parks Service is very involved in promoting ecotourism in some protected areas. In Mexico, several non-governmental organizations, as well as a governmental organization, the National Tourism Foundation, (FONATUR) are promoting ecotourism. In the Dominican Republic, the National Parks Administration created a Department of Ecotourism and there was at least one tourism agency specializing in ecotourism. In St. Vincent and the Grenadines, an advisory group on Ecotourism was established while in Suriname a company was formed to develop the tourist areas (METS) and it is believed that they are taking ecotourism aspects into consideration. In the Turks and Caicos Islands, there are some non-governmental organizations involved in ecotourism while in Venezuela, several of these organizations as well as government agencies in the tourism sector have begun to develop ecotourism.

2. Criteria for regulating tourism and the environment

Colombia, Costa Rica, Martinique (French standards), Mexico and Venezuela are the countries which possess the most developed legislative framework in the area of environmental protection. In the other States and territories responding to the survey, there are different legal bodies dealing with the question of the environment: it was difficult to determine the scope of these bodies from the answers to the survey.

In none of these responses were criteria aimed at regulating tourism activities mentioned. The Dominican Republic was the only country to make reference to a management plan developed in 1990 but never implemented. Furthermore, it is the only country which did not mention the existence of any legal instrument that addresses the protection of the environment. Colombia indicated a draft study of policies and guidelines for the development of ecotourism.

3. Planning

With the exception of Belize, Barbados, Martinique and St. Vincent and the Grenadines, the countries and territories reported the existence of various types of initiatives for integrating environmental protection, tourism and ecotourism into development plans.

The following are the most significant aspects relating to planning. Worthy of mention are those countries where ecotourism is an important element in the creation and management of protected areas (Colombia), in regional management plans (Costa Rica), in environmental management plans for coastal areas appropriate for tourism (Mexico), in the incorporation of environmental protection into plans for tourism development, management, management plans for parks, among other initiatives (Dominican Republic), into management plans for physical, insular and tourism development (Turks and Caicos) and in the Sustainable Development Plan for Tourism and Recreation in the Amazon (Venezuela).

The responses also contained references to plans for developing areas where ecotourism would be an important element. The following initiatives are worthy of mention: the development of a Marine Reserve for Birds and a Wildlife Sanctuary in Antigua and Barbuda; the national evolutionary conservation strategy of Barbados; the identification and study in Colombia of protected areas where ecotourism could be vital for regional development; a plan for the Guanacaste conservation zone in Costa Rica; designation of areas with conditions appropriate for ecotourism within the context of the Mexican government's environmental management plans; the development of certain areas in the Dominican Republic where private-sector ecotourism would be the main focus; studies on cays in St. Vincent and the Grenadines; the identification of certain protected areas for ecotourism (Suriname) and; plans for an integrally-planned environmental tourism centre in Venezuela.

G. Current Status of Ecotourism

Table 10 presents the responses to the survey questions relating to priority requirements for the development or sustainability of ecotourism, to local facilities and/or experience in the area of training for ecotourism and to the achievements or shortcomings of ecotourism.

1. Priority Requirements

The survey identifies nine factors likely to contribute to the development or sustainability of ecotourism as well as the need to establish an order of priority among them. Those factors likely to be given the highest priority (Nos. 1, 2 and 3 in the hierarchy) were selected and are presented in **Table 10**. The following are the factors that were given the highest priority by the countries and territories

territories which responded to the survey. The number of times that the factor was selected is also indicated:

Infrastructure	7
Qualified personnel	6
Institutions	5
Hotel facilities	4
Legislation	4
Incentives	3
Transport/communication	3
Information	2

It may be observed that the factors "infrastructure", "qualified personnel" and "institutional structure" were most frequently chosen as priority factors for the development or sustainability of ecotourism. These were followed by the factors "hotel facilities" and "legislation", which were given equal weight; then by "incentives" and "transport and communication". Finally, the factor "information" was mentioned in only two cases.

2. Local facilities and experience in each country for training in ecotourism

Countries and territories were asked whether or not they possessed adequate infrastructure or experience to train persons in ecotourism, whether they foresaw future demand in this area and if they were planning to carry out training programmes in ecotourism. Five countries did not respond to this survey item; of those that did, the responses were varied.

Antigua and Barbuda, Bahamas, Colombia, Mexico and St. Vincent and the Grenadines reported that they possessed neither the necessary facilities nor local experience locally to train their staff in ecotourism. Costa Rica and Venezuela, on the other hand, have the necessary experience and local facilities to provide training in ecotourism. All seven agreed, however, that there was a growing demand for training.

Turks and Caicos did not respond either to the question regarding facilities and experience for training nor to possible future demand for training.

In the case of the Bahamas, Colombia, Costa Rica, Mexico and Venezuela, there are plans for training in ecotourism. There are no such plans in Antigua and Barbuda or in St. Vincent and the Grenadines. Turks and Caicos recognizes that training is a necessity and that this need could be satisfied through in-house seminars.

3. Achievements and failures of ecotourism

No responses were received from Antigua and Barbuda, Bahamas, Belize, Guyana, Martinique or Surinam. Those countries that did respond to this question, however, generally did not refer to geography.

In three cases, Barbados, Colombia and Mexico, success was linked to fairly specific aspects, the most important of which is conservation. It was pointed out that ecotourism has given greater value to conservation activities has won greater respect for the natural and cultural environment, and has increased public awareness. The countries also indicated that ecotourism has encouraged activities aimed at protecting certain species. On the other hand, among the successes attributed to ecotourism are the diversification of the tourism industry, the popularization of conservationist values, economic benefits to local communities and certain programmes for assisting indigenous communities.

Costa Rica considers that the achievements that may be attributed to ecotourism are not yet evident in that country. Turks and Caicos, which considers its tourism to be 100% ecotourism, warns of the risks associated with that activity. St. Vincent and the Grenadines, as well as Venezuela, list among achievements, acceptance of or interest in this activity.

With regard to the failures associated with ecotourism, responses to the survey were quite varied. Barbados, as well as Turks and Caicos, pointed to the risk of degradation caused by visitor overload. Colombia has indicated out that these failures are linked to poor management of tourism on the part of institutions and a lack of adequate planning. Costa Rica and Mexico have reported no failures linked to this activity. St. Vincent and the Grenadines has cited instances in which the activity led to the displacement of a local community. Venezuela declared that its failures were linked to lack of resources available to the organization responsible for the management of national parks.

III. CASE STUDIES⁸

A. *Netherlands Antilles - Bonaire*

1. *Ecotourism in Bonaire - Summary*

The concept of ecotourism that is considered appropriate by the official tourist sector on the Island, is in keeping with the definition proposed by the World Tourism Organization which defines ecotourism as trips for the purpose of enjoying nature (Pieters (v.c.)).

In general terms, the official tourism sector as well as the industry feel that the type of tourism practiced on the Island is ecotourism. However, according to the conservationists, if they may be so called, who are represented by the protected areas administration, the type of tourism practiced in the Island is not entirely ecotourism. There is no clear consensus among by the tourist operators regarding the need to limit the expansion of the industry and to restrict tourist activities.

The Island's Tourism Corporation is promoting a large-scale project, with a strong ecotourism slant and special emphasis on the cultural and historical aspects. This project would be based in Rincon, in the interior of the Island.

2. *The Case of Bonaire*

a. *General description of the Island*

Bonaire is an Island with a surface area of just over 200km², located in the Caribbean Sea just off the coast of Venezuela. It, along with other Islands in the Caribbean forms part of the Netherlands Antilles. The Island is governed by an Executive Council which enjoys relative autonomy. The Island has a population of about 11,000 inhabitants. The most populated area and capital is Kralendijk.

The main economic activities in Bonaire are tourism and the salt production industry; both of these activities are directly related to the nature of the Island's resources. In fact, the type of tourism activity carried out on the Island may be described as nature tourism. This is therefore the main attraction for tourists, in particular the marine and coastal resources which, given the special geological, geographical and climatic conditions on the Island, lend themselves to underwater activities. Additionally, salt mining depends heavily on the topographical conditions in the western tip of the Island and on certain climatic and oceanographic factors.

⁸ The structure of the sections relating to case studies differs according to the quantity and quality of the information available. An attempt has been made generally to give references on sources of information in each of the sections, even when this information was given verbally.

b. Protected areas

i. Bonaire Marine Park

The most significant protected area on the island is the Bonaire Marine Park. There, natural resources on which underwater tourism depends are protected. Underwater tourism is the most vibrant economic activity on the island, represented by the sea and the coral formations which occur and the rich marine flora and fauna. The latter extends along the entire coastline of the island in a belt that stretches from the high tide line to the isoline some 200 feet (60 meters) deep; the total area of the park is 8,500 hectares which is divided into 5,900 land-based hectares and 2,600 marine hectares. (De Meyer and Hensen v.c.).

The Bonaire Marine Park was created in 1979 by an ordinance passed by the island's Executive Council, and later ratified by the government of the Netherland Antilles. A management programme for the marine and coastal resources of the island was also created, sanctioned by a contract between the Government of Bonaire and a private organization which is responsible for its administration.⁹

The administration of the park was originally assumed by the Foundation in 1979 with initial funding from the Worldwide Fund for Nature. However, it did not receive further funding and when the above donation was depleted, the administration of the park collapsed and activities ground to a virtual halt. Since then, the Consejo de Operadores de Recursos Submarinos (CURO)¹⁰, has assumed responsibility for some of the activities formerly carried out by the park's administration, particularly the maintenance and management of the system of buoys used for anchoring deep-sea divers' vessels. Recently, in 1991, the park's administration was re-activated with funding from the Dutch Government to cover the budget up to and including 1993. The condition imposed was that the park should be self-financing in the future by means of a visitor-fee system and that this system should be formalized by an appropriate legal instrument. This condition has been met (Reubold and Van't Hof, 1991).

9 Fundación de Parques Nacionales de las Antillas Neerlandesas (The National Parks' Foundation of the Netherland Antilles) —whose acronym is STINAPA in Dutch — is traditionally the only organization in these territories responsible for nature conservation activities.

10 Council of Underwater Resort Operators, an organization representing companies specializing in underwater tourism activities.

In any event, the limitations of the park's administrative system must be taken into consideration as it is operated by only 3 persons. (De Meyer and Hensen v.c.).

Deep-sea diving activities play an important role in the Bonaire economy; the sustainability of the economic benefits derived from these activities will only be possible if the exceptional quality of the island's underwater environment is maintained. Protection of the natural coastal and marine resource base is, in fact, the main objective of the marine park.

Success in the efforts to conserve these resources will generate constant economic benefits from underwater tourism; failure will lead to a gradual deterioration of the marine environment, to a decline in tourist interest in these attractions and to a fall in the revenue generated by these activities. On the other hand, this should show the profitability of other "properly" protected areas in the Caribbean, in particular, the U.S. Virgin Islands' National Park and the Cahuita Marine Park (Costa Rica) where the cost/benefit ratio should be approximately 1:10. These were some of the arguments put forward in favour of an annual fee for diving in the park, a charge which, as anticipated, was accepted and established (Bonaire Marine Park, 1991).

The budget for the marine park for 1993 was some US\$350,000; US\$200,000 to be raised through licence fees and US\$150,000 from the Dutch Government for further development of the park. This subvention will not be renewed in 1994 (Hensen v.c.). The budget proposed for 1992 took into consideration that 57% would be allocated to salaries, 39% to operational costs and 4% to depreciation (Bonaire Marine Park, 1991).

The fees collected from the use of the park, established by law, can only be used for its management, that is, for general administrative costs, maintenance of the buoys and other installations, surveillance, education and information, research and follow-up, and the generation of revenue.

The management of all protected areas is the responsibility of the National Parks' Foundation, STINAPA, which was previously mentioned, a non-governmental conservation organization, in which the Bonaire Executive Council plays a limited role by way of a representative on a the nine-member board of directors.

The administration of the Bonaire Marine is assisted and supervised to a certain extent by an advisory council which includes representatives from private sector tourism.¹¹

ii. Other protected areas

The Washington-Slagbaai National Park, which occupies a significant portion of the western end of the island, is potentially an important complementary attraction to the marine park which is certainly the island's main attraction.

It is located on two large properties acquired by the Government of Bonaire and its use is determined by a sales contract arrangement which stipulates that these properties may not be acquired for development in the areas of agro-fisheries, industry or traditional and urban tourism. There is no other official instrument which gives the status of a national park to a parcel of land (Newton v.c.).

As mentioned earlier, STINAPA is also responsible for the administration of the Washington-Slagbaai Park. The foundation's budget for the Park rose to US\$ 200,000 in 1993, including a US\$ 15,000 government subsidy.

It must be pointed out here that, as anticipated, an initiative aimed at developing tourism in the Rincón area is underway and that a banking entity has financial interest in it. This initiative is expected to generate some amount of employment. Rincón is currently a residential town with no significant economic activity. It is not a part of the park but it is located near to it and is along the same route. Moreover, it has its own historical and cultural value (Pieters v.c.).

There are other protected areas on the island including the flamingo sanctuary and other areas which enhance the value of Bonaire as an alternative tourist destination.

11 This includes representatives of CURO, referred to above, BONHATA, the Bonaire Hotel and Tourism Association, and CMM, Commissie Marien Milieu (the Marine Environment Commission).

c. Environmental considerations

The main instrument on environmental matters promulgated by the Bonaire Government is the Marine Environment Ordinance. This is the Ordinance that established the Bonaire Marine Park. One of the main features of the text is that it creates the Environmental Committee, a body which would involve the participation of the public and private sector and which gives its opinion on any project which may affect the marine environment. (Newton v.c.).

There may be a potential conflict between promoters of tourism activities and conservationists. Those who adopt a conciliatory position argue that, since tourism is the main source of revenue for conservation, there should rightly be a meeting and an alliance between the conflicting parties. (Pieters v.c.).

On the other hand, incentives towards industrial and hotel development -- exemption from all taxes on new investments for up to 10 years-- conflict somewhat with approaches to restrict tourism development expansion. Exemption, in any event, is not automatic; companies must request and qualify for this benefit.

The physical zoning of the island has emerged as vitally important for regulating land use, especially in the coastal belt. In the absence of proper control, residential and hotel development tends to be haphazard with no proper control. Although general guidelines for the establishment of a legal body have already been approved, various steps are still needed to conclude the zoning project.

The zoning project stipulates that at the same time, a general framework for protected areas as well as the development of studies on their carrying capacities be established.

The tourism industry favours two main aspects of environmental sustainability: the conservation of coastal and marine resources and, limitation of the expansion of the industry. The industry would agree to a master plan, including land-use zoning, in order to avoid case by case decisions. There is, however, a great potential for conflict when such concepts must be reconciled in the case of specific initiatives. (Loberg and Pieters v.c.).

The island authorities has been developing several initiatives geared towards ensuring the sustainability of underwater tourism activities. Important among these is the need for a special permit for operators of underwater activities, especially for divers. To obtain these permits, interested persons must

participate in annual courses. Also, a fee of US\$10 must be paid for a one-year permit to dive in the Bonaire Marine Park.

Although the Marine Park was only created in 1979, by the beginning of the decade of the seventies the government had already begun to pass legislation aimed at protecting the coastal and marine environment. The following restrictions have been imposed over the past 20 years:

- harpoon fishing is prohibited;
- no plants or animals, whether living or dead, may be taken from the waters, including corals;
- no substance may be extracted from the seabed;
- fishing is restricted;
- the use of anchors is prohibited, including on sand banks (ships have access to mooring buoys);
- there are protected areas in no type of recreational activity may take place.

Programmes at the hotel school on the island, as well as activities designed to improve public awareness of the need to protect the island's marine and coastal ecosystems, are contributing to achieving the above-mentioned objective.

d. Tourism in Bonaire

i. Main attractions

As mentioned earlier, the type of tourism that has been developing on the island is specialized, associated with the natural conditions that the island offers for underwater exploration. Moreover, within the area of underwater activity, in which two main areas can be identified, namely sports, focussed on harpoon fishing, and nature watch; Bonaire laws prohibit the former. Consequently, tourism in Bonaire is aimed at a very specific segment of the market.

The type of tourism referred to is highly competitive as the interested tourist can choose among several destinations in the Caribbean region

(Cozumel, Cayman Islands, Virgin Islands) from which to choose, all catering to this segment of the market. This is aside from the fact that there are other emerging destinations, such as Cuba, planning to offer the same attractions.

Nevertheless, despite the fact that they are of very little significance in economic terms, the island has other natural, historical and cultural attractions. Among the natural attractions are the land-based ecosystems, many of them within the Washington-Slagbaai Park, a flamingo sanctuary and the salt ponds in the western end of the island. Among the artificial attractions worthy of mention are the town of Rincón - which is becoming the centre for an ecotourism programme - and the salt industry.

The development of other attractions in order to diversify the island's tourism industry has been proposed. Among the natural attractions suggested are deep-sea fishing, yachting and the construction of beaches. Representatives of the private and public tourist sector emphasize, in particular, "non natural" attractions such as casino gambling. Some believe that attractions based on nature and those that are non-natural would only be complementary, not competitive. It is also suggested that one would not be dealing with different segments of the market (Loberg v.c.). Authorities in the environment sector are reluctant to create other tourist attractions (Pieters v.c.).

The main setback to the development of other alternatives would be the scarcity of manpower. Increased investment would entail the "importation" of manpower. In terms of the effect on the hotel industry, the need for more training opportunities has been suggested and, although there is a certain measure of training at the secondary level and access to hotel schools in Aruba and Curacao, a hotel programme needs to be created for the island. (Loberg v.c.).

As mentioned earlier, development has begun on an ecotourism plan centred on the town of Rincón, in the interior of the island, based not only on the natural resources but also emphasizing the historical and cultural aspects.

ii. Underwater tourism

The following are the reasons which would make Bonaire an attractive tourist destination for underwater explorers (Newton v.c.):

- The coral reefs are close to the coastline and there is no continental shelf.
- The island is far from the influence of the great rivers (Amazon, Orinoco).
- The island is also, outside of the zones likely to be affected by meteorological disturbances, such as hurricanes and storms, which are common to the Caribbean; it has been over 100 years since Bonaire was last affected by any such phenomena.
- The greatest variety of species of coral present in comparison to other competing destinations.
- Conservationist activities carried out in the park area long before its establishment in 1979.

Underwater activity is managed by 15 entities, almost all transnational, with agencies in Europe and the United States of America, which offer all-inclusive tourist packages, including licences to dive in the marine park (De Meyer and Hensen v.c.).

The costs for tourists to use the marine park, in addition to the annual charge of US\$10, is US\$35 for each dive. It has been found that, on average, a tourist makes about 10 dives throughout his stay; about 2 or 3 dives per day. (De Meyer v.c.) Therefore, at the rate of one visit per year, the cost for the average tourist to "use" the park would be in about US\$360. It is obvious that the licence fee is minimal for the average diver.

iii. Visitor arrivals

The island welcomed some 50,000 tourists in 1991, 40-50% of whom were divers (Bonaire Tourism Corporation, 1992; Newton v.c). This number is close to the maximum limit of the carrying capacity of the park; this capacity may, however, be increased through training programmes to change the divers' behaviour. On the other hand, it is believed that coastal development is already too excessive. The following table illustrates the recent development of underwater activities on the island (Bonaire Marine Park, 1992):

Year	No. of diver
1980	4,682
1981	6,833
1982	8,135
1983	7,922
1984	8,604
1986	11,537
1987	13,138
1988	16,081
1989	14,897
1990	16,488
1991	18,246
1992 (up to May)	7,641

As the figures above illustrate, there is a considerable growth in the activity. The cumulative annual increase in the number of direct users of the park - divers - for the period 1980-1991 was 13.2%. If the number of divers recorded up to May of each year is taken into account, for the period 1980-1992, the rate of cumulative annual increase would be 12.1%.

The number of dives from ships, up to May 1992, was about 36,137, that is, 4.73 per diver. The real average is smaller since many dives were made from the coast (Bonaire Marine Park, 1992).

On the other hand, the number of operating enterprises has grown from 4 in 1980 to 15 in 1993. (Bonaire Marine Park, 1992; De Meyer and Hensen v.c.).

The number of visitors for the first nine months of 1992 grew by almost 13% in comparison with the same period of 1991. That growth is divided into 24% for the European market and 12% for the South American market. The figures for those not identified as well as the rest of the world decreased because the number of countries surveyed increased.

The number of visitors arriving in 1990 and 1991 was 41,318 and 49,534, respectively. Projections for 1992, based on a ten- year period, equating receptive tourism with tourism demand and supposing that the historical tendency will continue, is a total of 56,000 visitors.

It was estimated that visitor spending for 1990 would increase to US\$5.4 million (Bonaire Tourism Office, 1990).

Excursionists - cruise ship passengers who do not stay overnight on the island - showed a significant increase in 1992. (The statistics distinguish between tourists and excursionists; both groups belong to the category of "visitors".)

iv. Tourism Incentives

With a view to encouraging the development of hotel infrastructure, tax exemptions for up to 10 years have been introduced for companies whose projects qualify. This minor tax exemption affects both property taxes and income and customs taxes. However, exemption is not automatic; companies must clearly request this incentive and qualify for it.

B. Costa Rica¹²

1. Ecotourism in Costa Rica - Summary

The category recognized by the Costa Rican Tourism Institute is ecological tourism (Hernandez v.c.). In its response to the survey on ecotourism carried out among its focal points by the Regional Coordinating Unit of the Caribbean Environment Programme, Costa Rica defined ecological tourism as an activity aimed at the enjoyment, research and protection of the natural wealth of a country. It has also been defined as the planned practice of tourism in protected areas, linked to the awareness of one's country's natural and socio-cultural assets.(Salazar v.c.).

The Costa Rican Ministry of Tourism, in referring to the need to rationally utilize the country's natural resources, maintains that "...the most rational use of the country's natural resources under the present circumstances is in the area of ecological tourism, which is considered to be an activity which achieves the following objectives (Chacon, 1992a):

- Strictly-controlled use of the environment, thereby ensuring its integrity and stability;
- A substantial contribution to the inflow of foreign currency;
- Improved socio-economic conditions in the regions where this tourism activity takes place;

¹² It can be observed that, in accordance with various concepts, the figures here differ or may appear contradictory to those given in the responses to the survey conducted by the Caribbean Environment Programme and presented in the corresponding chapter and annex. The source of these discrepancies was not always evident.

- Preservation of the cultural assets of the population;
- Promoting the development of an environmental culture; and
- Incentive to local tourism.

In Costa Rica, the term "ecotourism" corresponds to the commercial application of the concept of ecological tourism. The term has even been patented by a local firm involved in tourism (Gamez v.c.). However, in this chapter, the term "ecotourism" continues to be used as the equivalent of ecological tourism.

In any event, from the point of view of the national authorities and those involved in the tourism industry, ecological tourism is the type of tourism currently carried out in the national parks of Costa Rica. Nevertheless, there is an attempt to improve current practices in tourism in the national parks, orienting them more towards a model as described in previous definitions.

Tourist operators in Costa Rica have played an important role in promoting the country internationally as a choice destination for nature tourism. They have capitalized on the national priority which the government has ascribed to ecotourism, on the existence of a formal national system of protected areas with an appropriate infrastructure already in place, on the advantage for travellers to be able to visit various natural ecosystems in a short time and on the incentives offered by government to the tourism industry since 1985.

Ecotourism is also practiced in private protected areas, the best-known of which is the Monte Nuboso Monteverde Biological Reserve, which is administered by a non-governmental organization.

The ecotourist is considered to be a different type of tourist. Nevertheless, there is no objective information regarding this type of visitor to the country. Some agents specializing in nature tourism believe that the number of visitors who can be classified as ecotourists is minimal, distinguishing them from the tourist who wishes to experience nature but who does not wish to sacrifice his time or comfort. These tourists have even been referred to as "Disneyworld Tourists" (Gamez v.c.). Fairly recent studies carried out on the basis of airport interviews have revealed that of the 30% of visitors interviewed, nature was one of the factors that caused them to visit a country: more than 50% had visited a protected area during their stay (Boo, 1990).

It must be pointed out that Costa Rica was awarded the San Francisco de Asis International Prize for the Environment in Italy for its project entitled "Cantico a

todas las criaturas" (Ode to all living things) in the category "effective and successful action", in recognition of the country's "constant interest in conservation, for the creation of a System of National Parks and the National Institute on Biodiversity" (Ministry of Natural Resources, Energy and Mining, 1992a).

In Costa Rica, the protected wildlife represent today the main tourist attraction in the country. These areas account for 1.3 million hectares which is a significant portion of the country's surface area.

It is strongly believed that the potential for tourism development in protected areas is enormous, given that for various reasons of infrastructure, only 1% of protected areas is now being used for tourist activities. (Chacon v.c.). However, if the limitations recognized by the authorities in the natural resources sector with regard to number of visitors that can be accommodated annually in the areas considered, without including plans for development or regulation, any expansion of tourism will entail a risk of deterioration of the national parks (Alfaro v.c.).

In accordance with statistics published by the National Parks Service of Costa Rica (Bermudez, 1992), the national parks received almost 500,000 visitors in 1991; of that number, 55% were foreigners who in turn accounted for 54% of the international visitors to the country in the same year, some 505,000 according to information received from the Tourism Institute of Costa Rica (1992). The total number of visitors to the park grew from 1986 to 1991, at an average annual rate of 13.6%. Taking account of foreign visitors alone, the annual average rate reached the significant figure of 31.3%. If this latter percentage is compared to an increase in the number of international visitors to Costa Rica over the same period, i.e. 14.1% on average per year, is easy to conclude that there is a growing number of international tourists showing interest in nature tourism.

Among the initiatives undertaken by the Government of Costa Rica through its relevant bodies, the adoption of the concept of "protected area", which is wider than protected wildlife because it includes buffer zones and other non-protected areas, is worthy of mention. Other noteworthy initiatives are the establishment of regional committees for protected areas, the first level of management and for ensuring representation by all private or public organizations and institutions, directly or indirectly involved in the management of the area in question. Both elements are appropriate for the development of a type of tourism consistent with the definitions of ecotourism given above.

On the other hand, in addition to all the training in tourism available in Costa Rica and which will be dealt with further in this article, one must note that a private university, the Latin American University for Science and Technology (ULACIT)

is developing a training programme in ecotourism at both the undergraduate and postgraduate (Masters) levels.¹³

2. The Case of Costa Rica

a. Protected areas

Since 1990, the management of natural resources in Costa Rica has been centralized in the Ministry of Natural Resources, Energy and Mining (MIRENEM). Its main functions include administering legislation regarding conservation and the rational use of natural resources, establishing through executive decrees, binding rules and regulations for the rational use and protection of natural resources, negotiating and granting permits and concessions in this area, establishing and developing environmental training programmes, taking inventories of natural resources, etc.

As far as protected areas are concerned, the Ministry is assisted in these functions by the National Parks service and the General Forestry Division.

The categories of protected wildlife recognized in Costa Rica include national parks, biological reserves, national monuments, forestry reserves, protected areas and wildlife sanctuaries. The protected wildlife system, which was established in 1963 with the creation of the first area, has ensured the protection of representative samples of the main ecosystems in the country through the establishment of 72 other areas. According to the following figures, almost all of these were established after 1970: (MIRENEM, 1992d).

Year	Protected areas established
Up to 1970	5
1971-1975	14
1976-1980	16
1981-1985	20
1986-1990	7
1991	10

13 Regional Masters Programme in Ecological Tourism

Table 11, shows the number of protected areas according to categories as well as total surface area. The most popular category of protection is that of national parks. Generally speaking, there has been a process of transformation of forestry reserves, protected areas and wildlife sanctuaries into national parks. In 1991, 5 forestry reserves were converted to national parks. These parks, which total 18, occupy a land-based area of almost 480,000 hectares (44% of the land space protected) and marine area of 314,000 hectares. In terms of surface area, the following areas continue to be significant: forestry reserves (303,000 hectares in 9 reserves), protected areas (160,000 hectares in 28 zones) and animal wildlife reserves (126,000 hectares in 8 reserves).

The Forestry Administration has responsibility for forestry reserves, protected areas, reserves for wild fauna and national woodlands. Some 46 protected areas account for almost 589,000 hectares. The Division has 89 staff members who are not able to carry out all the management functions required. Nineteen of these areas are unmanned while seven others have only one member of staff. The average surface area monitored by one person in 1990 was 7,083 hectares.

The National Parks Service is responsible for national parks, biological reserves and national monuments. This represents 26 areas covering 497,000 hectares of land space and 314,000 hectares of marine space. There were 346 officers in 1990, each with responsibility for 865 hectares. Only a few protected islands do not have officers from the Parks Service.

As a new approach in the management strategy of protected areas, the government has recently developed the National Protected Areas System, a new management model aimed at transforming some of the principles upon which the protected areas system has been built since 1970. The new perspective is to "consolidate the protection of the most important natural and related ecosystems in the country as well as their biodiversity and integrate them in a sustainable manner into the process of economic development of the rural areas and of the country in general". (MIRENEM, 1992a; 1992d) These protected areas include contiguous management categories, buffer zones and related non protected areas. The overall management of the protected areas is the responsibility of the Regional Committees, one for each protected area, representing the resident communities, organizations likely to be involved and private enterprise. These committees should be involved at the first stage of approval, coordination, support and follow-up to plans and programmes carried out in the area in question.

On the other hand, MIRENEM, in an effort to consolidate the country's natural heritage, has been developing a programme of land acquisition in wildlife, both to incorporate them into national parks and to contribute to buffer zones around these protected areas. The programme has suffered the normal setbacks to this type of initiative: lack of public funds. In any case, the concept of buffer zones does not require that these belong to or be managed by the State; the idea is to carry out in these areas, agricultural and/or forestry practices that are consistent with the management plans for protected areas and with the notion of sustainable development.

Up until 1982, the financial requirements of the protected areas system were met almost entirely through State funding. The government's support was strong and grew for several years. However, the financial crisis of the eighties took its toll on the protected areas system and the budget granted to the system in 1985 was 33% of the budget it received in 1981, although the system continued to expand in terms of the surface area covered. New sources of funding had to be sought: non-governmental organizations involved in conservation and established for that purpose as well as international conservation organizations played an important role in sourcing and channelling external funding towards the system. In 1990, the total amount of funds spent on the protected areas system was US\$6.3 million of which, a little more than US\$2.2 million was from external sources. (MIRENEM, 1992d).

The recurrent budget for the protected areas system is funded through fees collected for entry to the parks, with some contribution from the government's recurrent budget and the remainder from a heritage fund through which external debt is exchanged (exchange of debt for nature, also referred to as "swaps"). This type of operation did not interest the Costa Rican government for long because the discount rates were greatly reduced. (Alfaro v.c.).

Through donations from international non-governmental and governmental organizations, Costa Rica has been able to negotiate a little over US\$85 million, at a discounted value, into local currency for the conservation and management of protected areas and to carry out research projects, sustainable production from its woodlands and reforestation. (MIRENEM, 1992d).

The system generated its own funds, albeit less than those collected through entrance fees, from what is collected from researchers and users of the facilities. (MIRENEM, 1992d).

Entrance fee to any public national parks does not exceed 200 colons. This is a meager sum when one imagines that this type of collection accounts for a significant portion of the national park's budget. To overcome this situation, a funding strategy has been developed in which two proposals are being made. One of them, which is a bill, proposes to introduce a system of differentiated fees between local and foreign tourists, which would significantly raise the average entrance fee. The other proposal is the so-called "gold pass", a kind of passport which would give access to all national parks in Costa Rica. Both initiatives would bring in about half a million dollars in entrance fees (Alfaro v.c.).

The Monteverde park, a very popular private protected area, charges 500 colones per person, which amounts to some 80,000,000 colones per year. Although this covers the cost of staffing for the park, the park also receives funding from other sources (Alvaro v.c.).

Although no studies have been carried out into the carrying capacity of the various protected areas for which the Ministry has responsibility, there is concern regarding over-loading which has already been detected. Tourism activity is concentrated in two areas, the Valle central and the Pacífico Medio; there are also small, fragile areas such as Manuel Antonio, Carara and Cabo Blanco which, although they do not have conditions that are appropriate for tourism activities, were visited in 1991 by 23.6% of the foreign visitors to Costa Rica. Nevertheless, there are regions with wildlife where tourism activity is just being developed.

On the basis of the Ministry's own experience, there are attempts to exercise tighter controls over the pressures to which the parks are subjected. For example, in the small but popular Manuel Antonio Park which, was visited by 23.6% of foreign visitors to Costa Rica in 1991, permits for camp sites have been abolished. On the other hand, agreements are being sought with the private sector to reduce the number of visitors from the current 3,000 to 1,000 per day (Bermudez, 1992; Hernandez v.c.). In any event, studies are being carried out into the capacity of six parks funded by the Costa Rican Tourism Institute, with a view to formulating a management agreement with the University of Costa Rica (Chacon v.c.). Moreover, certain guidelines have been imposed and quotas have been established by government decree.

The Monteverde park limits the number of its visitors through a reservation system. In the La Selva reservation, which is administered by another non-governmental organization called the Tropical Studies Organization, only 76 persons are admitted each day.

As far as the importance and need for a system of control of the number of visitors is concerned, it must be pointed out that, if present conditions allow the number of visits to national parks to continue to increase at the levels of the past decade, and up to the year 2000, (the average annual growth rate for the period 1982-1991 and 1986 to 1991 were 10.3% and 13.6% respectively), the number of visitors to protected areas could reach levels of between 1.2 and 1.6 million annually.

Later in this report, in the section dealing with visitor arrivals, a quantitative background will be given to visits made to national parks in Costa Rica.

b. Environmental considerations

The Public Health Law (Ley General de Salud) provides the general legal framework for environmental matters. The preoccupation with this theme in Costa Rica, however, led to the formulation of a Draft Environmental Code 17 years ago which, for various reasons, has not yet been through all the legislative channels (Hernandez v.c.).

At the instigation of MIRENEM, the General Environmental Law is now under discussion. This framework law reflects the environmental policy and its main objective is to foster harmony between the human being and his environment. Concretely, the law proposes to establish fundamental rules relating to protection and use of natural resources and to the planned management of the human environment. It seeks also to avoid contamination of physical resources (air, water, soil, landscape), damage to biotic resources (flora, fauna) and deterioration of the human environment. (MIRENEM, 1992c).

The draft law seeks to make binding the conduct of environmental impact studies before any initiatives are undertaken. It also stipulates that protection and improvement of the environment are of public concern. It promotes land-use management, planning for urban development industrialization as well as economic and social development by establishing mechanisms for inter-institutional coordination. It regulates individual conduct regarding the environment as well as the relationships which emerge through the use and conservation of natural resources, etc.

c. *Tourism in Costa Rica*

i. Background

Tourism in Costa Rica is a growing economic activity which, in 1991 was already the second largest industry for the national economy. Its development over the last few years, in terms of its contribution to foreign exchange earnings, is illustrated by the following figures (Costa Rican Tourism Institute, 1992):

Year	Total Exports	Foreign Exchange Earnings from Tourist	Relationship Tourist/Exports
1987	1.158.3	136.3	11.8
1988	1.245.7	164.7	13.2
1989	1.414.6	206.6	14.6
1990	1.448.2	275.0	19.0
1991	1.593.7	330.6	20.7

(The figures given in the above table for exports do not include foreign-exchange earned from tourism activity)

According to the above figures, exports grew by an average of 8.3% annually between 1987 and 1991. Foreign exchange earnings from tourism activities grew by 24.8 % annually. The relationship between foreign exchange earnings through tourism and earnings generated through the export of goods grew by an average of 15.2% annually.

The number of tourist arrivals in 1991 rose to 504,649 persons. The outlook for 1992 was 590,000 tourists and earnings of US\$420 million (Chacon, v.c.). In the following section, the background to tourist arrivals is given.

The structure of the sector is determined by Law No 6990; it establishes the categories of agents as well as incentives for the activity.

It may be stated generally that receptive tourism in Costa Rica is highly competitive, since a few large companies control a large portion of the market. There are some 300 operators: many of the smaller ones are trying to specialize in certain segments of the market in order to improve their skills and become more competitive in the face of competition from the large operators. (Gamez v.c.).

Tourism is expanding at a fairly steady rate. This is not true of the economic and social infrastructure of the country. This leads to certain drawbacks and potentially serious problems. (Salazar v.c.).

It has also been pointed out that there are certain limits to the training of agents in the sector, as well as officers of the National Parks Service and the Forestry Administration. Tour guides speak English but have no technical knowledge, while the park rangers are mere rangers. (Salazar v.c.). One must realize that there are ample opportunities for training in tourism in the country (Salazar v.c.). There are roughly five or six tourism schools at university level as well as others offering parauniversity training. The Instituto Nacional de Aprendizaje (INA - National Training Institute) conducts courses and awarded diplomas to 2,480 persons in 1991. There are plans to train 15,000 persons in five years. There is also a programme underway to train hotel personnel and a study is being conducted for the establishment of a Hotel School supported by the Milan Chamber of Commerce. (Salazar, v.c. 1993; Chacon v.c.). Finally, as indicated earlier, the Latin American University for Science and Technology (ULACIT), is developing a training programme in ecotourism at both the undergraduate and postgraduate (Masters) levels.

The government agency in charge of the sector is the Costa Rican Tourism Institute (ICT) which has been given broad powers by the existing legal instruments. The ICT benefits from a fee charged to the hotel sector, 3% of hotel rates, and this allows it to fund itself and also contribute to the National Parks Service's studies relating to tourism activities in protected areas.

As far as regulations are concerned, in addition to the potential for control which the tourism incentive system provides, the law also grants concessions to the ICT in terms of lower taxation and approval of projects for tourism development.

The hotel sector in Costa Rica was represented in 1991 by 210 hotel establishments with 7,196 rooms and 6,209 persons directly employed (Costa Rican Tourism Institute, 1992).

ii. Visitor arrivals

■ International tourists

In **Tables 12 and 13**, information is provided on the actual tourist arrivals in Costa Rica. The first provides information on visitor arrivals in Costa Rica by zones and by countries from 1982 to 1991. The second provides similar information limited to the relevant zones and covering the period 1982-1991. The source of both tables is the Costa Rican Tourism Institute. (1992)¹⁴

According to the Costa Rican Tourism Institute (ICT), as reported earlier, international tourist arrival to Costa Rica in 1991 rose to 504,649 persons originating from the following regions of the world:

North America	223,126
Central America	164,809
South America/Caribbean	37,570
Europe	67,319
Rest of the world	11,825

The United States provided by far the greatest number of visitors to Costa Rica in 1991 with 173,626 visitors, 34% of the total number. The countries having border with Costa Rica follow: Nicaragua with 73,558 tourists - 15% of the total number and Panama with 53,398 tourists representing 11% of total visitor arrivals.

Central America, considered globally in terms of number of tourists, is almost equivalent to the United States with 33% of all visitors arriving in Costa Rica. In third place is Europe, also taken globally, with a little more than 13%, the majority of whom are from the European Economic Community. As far as development in tourism in Costa Rica is concerned, during the period 1989 to 1991, (See **Table 12 Annex 1**), total growth was slightly higher than 34%. For the larger areas, important and significant increases in terms of absolute figures were shown in the visitor arrivals from Europe (48.4% over the period) and North America (47.7% over the period).

14 The Costa Rican Tourism Institute includes in the category of international tourists, all persons of non Costa Rican nationality entering the country with a tourist, diplomatic or official visa. It excludes persons in transit and cruise ship passengers (excursionists) whose stay in the country is less than 24 hours.

In analyzing a more extended time frame, i.e. the period 1982 to 1991 as shown in **Table 13**, we realize the need to divide the series into two sub-periods, 1982 to 1986, where a strong decline has been observed in the number of visitors to Costa Rica and from 1986 to 1991 where, on the contrary, there is a large increase in the number of international tourists. The trend is a downward one up to 1986 and an upward one from 1987. In terms of annual rates, between 1982 and 1986, the number of tourists arriving in Costa Rica decreased at a rate of 8.5% per year but between 1986 and 1991, their numbers grew by 14.1% annually.

The trend indicated may be linked to the economic crisis of the 1980's which saw restrictive structural adjustment policies which brought about severe recessions in Latin American countries. This period also gave rise to political turmoil, particularly in Central America.

In examining visitor arrivals, it is important to consider the category "excursionists" which corresponds chiefly to tourists arriving on cruise ships and who remain in the country less than 24 hours. During 1991, Costa Rica welcomed 117 cruise ships with 67,923 passengers, 90% of whom were arriving from the United States (the majority), Canada and Europe. The number of cruise ships had increased by 29% over 1990, a year which had already seen an increase of 11% over 1989. On the other hand, the number of tourists increased by 19% in 1991 compared to 1990. Sixty-nine percent of tourists arriving on cruise ships visited an attraction using local tourist services (tours).

■ Tourism in national parks

Table 14 of Annex 1 presents a chronological breakdown of the number of visitors to national parks between 1982 and 1991, according to figures supplied by the National Parks Service (Bermudez, 1992). Some background information has already been provided.

The number of visitors to national parks has grown from nearly 206,000 in 1982 to a little over 496,000 in 1991. The annual growth rate, between the first and the last year of the period, is 10.3%. The type of visitor, local or foreign, has changed significantly over the period. International tourism has also increased from 31.8% in 1982 to 55.1% in 1991 while the number of local visitors has decreased from 68.2% in 1982 to 44.9% in 1991. Nevertheless, in absolute terms, the number of local visitors has not decreased and has actually grown steadily, except in the 1982/1983 comparison, although at a rate far below that of foreign

in the 1982/1983 comparison, although at a rate far below that of foreign visitors. For the entire period, the average growth rate for local visitors was 5.3% while the figure for foreign visitors reached 17.2%.

It is possible, as in the case of international tourist arrivals, to distinguish two sub-periods for which the trend in growth rates differ, 1982-1986 and 1986-1991. Up until 1986, local visitors to parks in Costa Rica increased at an average annual rate of 8.2%, far exceeding the 1.7% corresponding to the annual average growth rate for foreign visitors. Nevertheless, from 1986, the situation was reversed and the growth rate in local visitors between 1986 and 1991 fell to 3% annually while for foreign visitors, it grew significantly to 31.3% annually. In terms of overall visitor arrivals, the annual average growth rates were 6.2% for the period 1982-1986 and 13.6% for the period 1986-1991.

The dramatic increase in the number of foreign visitors to Costa Rica's national parks has been attributed to the notable increase in hotel capacity since the passing of the Tourism Encouragement Law (Ley de Incentivos Turísticos) in 1985, as well as to the effective tourism promotion campaign carried out by the ICT at the international level, emphasizing the conservation work of the National Parks Service over the last 20 years. On the other hand, in relation to the significant drop in the growth rate for local visitors to the parks, it has been suggested that the possible causes are economic in nature; the cost of local tourism has increased owing to the investment trend in tourism which favours services to the international tourist, services that are generally more costly than the local tourist can afford. (Bermudez, 1992).

iii. Tourism Incentives

The Tourism Development Encouragement Law has been in force since 1985. Basically, this law declares that the tourism industry is of public importance and has as its objective the development of tourism activities for which incentives are established. These incentives are aimed at encouraging the undertaking of meaningful programmes and projects. Under this law, various benefits are given to investors in the areas of hotel services, local and international air transportation of visitors, maritime transport of visitors, travel agents dealing exclusively with this type of activity and finally car rental for local and foreign tourists.

Another type of incentive for the tourism industry is given through promotional and advisory activities. The Costa Rican Coalition for

Development Incentives (CINDE) is a non-profit private organization devoted to attracting investment, to the promotion of non-traditional exports and to training for the entrepreneurial sector. In agreement with the ICT, it carries out promotional activities abroad by channelling resources; it participates in the National Tourism Development Plan and gives advice on attracting investments. Moreover, the CINDE supports the hotel sector through its different activities. (Lizano v.c.)

Finally, it must be pointed out that, although the rules affecting the tourism industry, in particular those relating to hotel development, correspond to national criteria as it is the municipalities which in the final analysis grant the building permits, applying decision-making criteria that are not always homogenous, firms may lose or benefit through variations in costs or benefits depending on the decision-making criteria used (Lizano v.c.).

C. U.S. Virgin Islands: Saint John

Saint John is one of the islands which, together with Saint Thomas and Saint Croix, make up the U.S. Virgin Islands. Unlike Bonaire which, although it is a part of the Netherlands Antilles, is self-governed and enjoys a certain amount of autonomy, Saint John does not fall into this category. Moreover, in the reports prepared by the Department of Economic and Agricultural Development (SEAD), statistics are given for the entire territory or for Saint Thomas and Saint John together and Saint Croix is taken individually. Consequently, except in the case of the U.S. Virgin Islands National Park located in Saint John, it is difficult to study the island on its own. Therefore references will be made to the territory in general or to Saint Thomas and Saint John together. Only in certain cases will references be made to Saint John alone.

1. Ecotourism in the U.S. Virgin Islands and in Saint John - Summary

a. Ecotourism Council

In the U.S. Virgin Islands, ecotourism appears to be a preoccupation of local government authorities and certain community leaders. Therefore, on the advice of the Committee of Tourism Experts of on Ecotourism was established which was later changed to Ecotourism Committee. Its objective is to facilitate, coordinate and encourage public and private cooperation in order to preserve the natural, cultural, historical and archeological resources of the country as well as to promote sustainable development in an effort to make the U.S. Virgin Islands a choice ecotourism destination. In order to fulfill this objective, three basic mechanisms were identified: the collection

and dissemination of information, public education and the promotion of ecotourism(Committee, 1992).

b. Saint John

At least 75% of tourists who go to Saint John do so in order to enjoy the attractions of the Virgin Islands National Park, its marine and coastal ecosystems and its tropical forest ecosystems. The type of tourism currently carried out is nature tourism. This is ecotourism if we accept the broader meaning of the term, which is the usual practice of the government authorities responsible for promoting tourism, as well as the players in the industry who are all trying to capture this new segment of the market built around nature.

Nevertheless, in the view of the administrator of the Virgin Islands park, the visitors to the park are not "ecotourists." He believes that the term 'ecotourist' should be limited and similar to that of "the old traveller", an educated person who is seeking to experience local culture and nature without destroying it, spending long periods of time (perhaps one or two weeks) in the places that he visits. This definition of tourist does not apply to the tourists we know today (Koenings v.c.)

The park is today included in an international category of protected areas "Biosphere reserves", which has been designated by the MAB (Man and Biosphere) programme of the United Nations Organization for Education, Science and Culture (UNESCO). This is a type of protected area where there is an attempt to harmonize the relationship between man and nature to achieve effective conservation of certain systems. This designation has been assumed by the park authorities and orients the park towards a style of ecotourism. The park management is currently working in collaboration with the University of Tennessee to determine the type of participation expected of the St. John community in the management of the park.

As far as the entire U.S. Virgin Islands is concerned, the tourism activity that is carried out in the National Park is quite significant, given that during 1991, of the total number of visitors to the country, some 37% visited the park. Nevertheless, with a little more than 760,000 annual visitors up to 1992, the park was operating at full capacity: to increase this without damaging the existing ecosystems present, several additional regulations will have to be imposed.

All in all, the park authorities are conscious of the model role which Saint John plays in the development of other parks in the Caribbean.

Of the many initiatives that the Saint John park has undertaken, its status as Biosphere Reserve is by far the most important. In particular, a better working relationship is being sought with the island's community.

2. The Case of Saint John and the U.S. Virgin Islands

a. General Description

The population of the U.S. Virgin Islands was 103,200 persons in 1988, of which 51,900 persons were in Saint Thomas/Saint John (Tourism Task Force, 1991). In 1990, the population of Saint Thomas and Saint John was 48,166 and 3,505 inhabitants respectively (data taken from a census in 1990 and provided by the Hotel Association of Saint Thomas and Saint John, 1993).

In 1990, the work force was estimated to be 45,780 in the entire territory with an unemployment rate of 2.9%, down from 1983 when it was 8.2% (Tourism Task Force, 1991).

The GNP in 1987 was estimated at US\$1,246 million and personal income at US\$924 million. Per capita income in that year attained the level of US\$8,717 or 56.3% of that of the United States. The three previous indicators have constantly increased since 1980 (Tourism Task Force, 1991).

b. Protected Areas

The major portion of the island of Saint John forms part of the Virgin Islands National Park and also includes the Island of Hassell located in front of Charlotte Amalie on the island of Saint Thomas. The park forms part of the national parks system of the United States and is associated with the national monument Puck Island Reef and the Christianstead National Historic Site, both located in Saint Croix. The National Park of the U.S. Virgin Islands was established in 1956 on a property covering more than half of the island and which had been donated for this purpose.

The surface area of the park is some 9,000 acres (3,600 hectares) and its marine area is 6,000 acres (2,400 hectares), totalling 15,000 acres (6,000 hectares), almost all of which is accessible (Koenings v.c.).

In 1992, the park welcomed some 760,000 visitors, a figure which is close to its carrying capacity¹⁵. In order to exceed this number, certain additional regulations and agreements will be required within the industry, especially as these relate to cruise ship operators. The park administration aims to control the number of visitors in certain areas, especially on the beaches, by limiting the size of the cruise ships that are allowed to dock near beaches. Experience

¹⁵ The statistics used are from the Economic Research Office of the Department of Agricultural and Economic Development. However, other oral and written sources such as the Saint Thomas-Saint John Handbook indicate that the number of annual visitors exceeds one million persons.

and observation of the effects of certain tourist loads has allowed us to establish limits for certain beaches.

Given the large number of visitors to the park, and since the park authorities are aware of the fact that the park is approaching its capacity, they have opted, on occasion, to over-load some beaches while protecting other areas.

Seventy-five percent of tourists who visit Saint John pay a visit to the National Park (Koenings v.c.). The park maintains a centre open to visitors near the marine terminal at Cruz Bay where various samples of what the park offers as well as video cassettes are on display. Park rangers are trained to assist tourists in planning their visit, which may include guided tours, historical tours, underwater tours, craft demonstrations and overnight camping trips.

The park has many attractions: beaches, marine parks, historical ruins, scenic trails, yachting areas, recreational fishing, etc. The most popular attractions however, are the beaches: the more accessible beaches have lifeguards and are equipped with dressing-rooms, cafeterias, souvenir shops, diving equipment rental, water sports centre, etc. However, there are more remote beaches which can be reached by following the trails within the park. There are picnic sites throughout the park. Underwater sports is a main attraction and the characteristics of the park's coastline make it an appealing choice for sailing enthusiasts who dock in the Virgin Islands. Recreational fishing is permitted in some areas.

In addition to the hotels located in Cruz Bay, the park itself offers accommodation. There is a traditional campsite with appropriate infrastructure, however the campsite at Maho Bay is worthy of mention because it is equipped with shops for guests and an infrastructure that is adapted to the environment, thereby minimizing the negative impact on the ecosystem. The site is considered to be a model of ecotourism infrastructure; its owner is a pioneer of this type of initiative within and outside of the United States.

The Virgin Islands National Park has a budget of some 2.3 million dollars annually (Koenings v.c.).

The following figures indicate the number of visits to the park each year:

	1991 (No.)	1992 (No.)	Variation %
Daytime visits	543,708	629,207	15.7
Overnight stays	710,180	134,263	-19.3
Total visitors	166,472	763,470	7.5

It can be seen that during 1991 and 1992, whereas there was a significant increase in the number of daytime visitors, there was a sharp drop in overnight visitors to the park; on average, there was a significant net increase over the two years (SEDA, 1993). Moreover, the 710,000 visitors to the park in 1991 represented 36.6% of the nearly 2 million visitors to the U.S. Virgin Islands. It may be said that for every 100 visitors to the country, 37 of them visited the Saint John park.

As far as protected areas are concerned, in later discussions of environmental matters relating to the U.S. Virgin Islands, mention is made of the official decision to conserve areas of special interest, observation sites and trails. Although this classification does not involve changes of ownership, it is a mechanism for increasing the protected surface area of the Virgin Islands in general, although not necessarily that of Saint John.

Finally, let us repeat what has already been stated regarding the creation of a biosphere reserve largely in Saint John and incorporating the park zone. The activities that will be generated by virtue of this designation are also the responsibility of the U.S. National Parks Service.

c. Environmental considerations

It may be said that concern for environmental matters in the U.S. Virgin Islands ranges from moderate to limited, judging from the proposals put forward in the Global Plan for Economic Development approved by the country's government. Through a revision of the sectoral and specific objectives of the plan, as well as of the strategies it promotes, it can be seen that although the subject of the environment has been dealt with at a trans-sectoral level, in the sense that it touches all the areas of interest within the plan, it has not been sufficiently emphasized in the light of the future

dependence, of the country's economic activities on the environment and the recognition that current development has reached its full capacity.¹⁶

As far as economic development is concerned, growth continues to be a major part of the overall objectives of the local government. Concern for the environment is expressed in only one of the specific objectives where it is stated that there is need to ensure that growth always takes into account environmental and social goals. One strategy proposed therefore is that priority should be given to long-term social and environmental consequences and to the cumulative effects of development above short-term economic gains. This is one of five strategies directed towards economic development of a total of seven specific economic development objectives.

Regarding tourism, the overall objective is for sectoral development that is in keeping with the country's heritage and its physical environment. Among the specific objectives, at least one seems to incorporate sustainable environmental development since it proposes a type of tourism development based on a realistic understanding of the limits of growth; the three strategies cover environmental considerations: formulation of a plan built around the social and environmental capacity of the territory, implementation of environmental protection and preference for tourism programmes that are more quality- than quantity-based.

Another of the specific objectives is the reduction of the negative impacts of tourism on the social and cultural fabric of the country. This gives rise to six strategies which will allow for an alternative style of tourism that is more environmental friendly.

Other strategies relating to other specific objectives for the tourism sector include environmental issues. There are 10 objectives relating to the sector and only 2 fully incorporate elements that favour a type of tourism that is environmentally sustainable.

The other sector which is dealt with explicitly in the Global Plan for Environmental Development is agriculture. In general, the plan seeks, by way of 19 specific objectives, to increase agricultural production with a view to making the country self-sufficient. Only one of these objectives is consistent with environmentally-sound development. It is aimed at land conservation and management which will ensure their long-term use.

In any event, in addition to United States regulations, which also apply to the U.S. Virgin Islands, there are legal instruments promoting environmental

¹⁶ References to the Global Plan for Economic Development are taken from the document drawn up by the Committee for Economic Development within Government (1992).

protection which have been passed by the territory's government. Worthy of note is the Virgin Islands Coastal Areas Management Act of 1978 and the Rules and Regulations regarding Navigation, Docking, Anchoring of Ships, 1992 (Mercer v.c.).

Also worthy of mention is the resolution approved in 1992 on the protection of special areas and trails. "Areas of special interest"¹⁷ have been identified and, whether they are public or private, management plans have been drawn up for submission at a later date to the local legislature and to public fora for discussion. Once approved, these management plans will constitute regulatory instruments. At the moment, this concerns 18 special areas and sites which are in need of protection for environmental reasons. (Higgins v.c.).

Those concerned with the question of the environment in the country feel that there are no incentives towards conserving the islands' natural resources. In fact, there may even be disincentives such as taxes linked to increasing value of the land which forces landowners to develop them or to sell them for development. Tax exemptions granted to project promoters encourage this situation. Exemptions are not automatic, they have to be requested through an industrial development commission; nevertheless, a certain acquired right to this exemption is recognized and if the project meets all the requirements under law, a request for exemption will not be refused. (Higgins, Kogis and Mercer v.c.).

In spite of the importance of the environment to the U.S. Virgin Islands, the subject of the environment in general and ecotourism in particular has not been dealt with in formal education, except for a few public awareness campaigns and some environmental education at the school level.

d. Tourism in the Virgin Islands

i. Limitations and outlook

The government of the U.S. Virgin Islands recognizes that the country is at a crucial stage of its economic development. On the other hand, if the islands, (St. Thomas, in particular), continue to develop at the rate they have over the past six years, the population could double in a few years' time and as a consequence, the demand for roads, schools, electricity and other public services could also double. Given the current zoning of the islands, one may expect considerable increases in population density. However, economic growth may not take place since

17 Areas of Particular Concern - APCs.

the main factors behind it, climate and a clean environment, could be seriously affected thereby causing a fall in competitiveness of the U.S. Virgin Islands as a tourist destination. (Economic Development Commission, 1992).

The islands' tourism market is also threatened by other factors such as the changing face of the cruise ship industry, increasing competition within the region and the re-emergence of Cuba as a tourist destination. It has been suggested that there is a need to change promotional strategies and to direct them to the traditional traveller who stays overnight in the islands versus the cruise ship clientele, given the greater multiplier effect of the first type of passenger. At the same time, it is felt that tourism promotional programmes should be revised in order to focus them on the historical, cultural, artisanal and gastronomical attractions of the islands. Finally, it has been suggested that promotional campaigns be conducted in South America in order to promote tourism in the Virgin Islands during the low season in the northern hemisphere. (Economic Development Commission, 1992).

The Global Plan for economic development in the Virgin Islands proposes, as an objective for the tourism sector, to develop and maintain a vibrant tourism industry that is well-planned and controlled and which interacts harmoniously with the culture, traditions and natural heritage in order to bring about a mutually-satisfactory economic, social and physical environment. In order to achieve this, links should be strengthened with other sectors of the economy, participation should be improved in all aspects of the industry, a more balanced distribution of the returns from tourism must be achieved, the islands' appeal as a tourist destination must be heightened, a stable tourist economy must be maintained, a tourism plan must be developed on the basis of a realistic understanding of the limits of growth and finally, reduction of the negative impacts of tourism on the cultural and social fabric of the islands must be achieved. Other specific objectives must also be achieved. (Economic Development Committee, 1992).

ii. Visitor arrivals

Table 15 presents the main indicators of tourism development in the U.S. Virgin Islands; no distinction is made between the various islands which comprise the territory.

According to the table, almost 2 million visitors arrived in the islands in 1991. This figure, compared with that of 1983, represents an increase of just over 60%, representing an annual increase of about 6.1%.

Seventy-four percent of these visitors were excursionists, who arrived mainly on cruise ships, spending less than 24 hours in the territory and not staying overnight. The number of cruise ships which docked in the territory in 1991 amounted to 1,240; between 1983 and 1991 this figure increased to 73.4% at an average cumulative rate of 7.1%.

Although cruise ship tourism is a dominant feature of the industry in the U.S. Virgin Islands, in terms of income for the territory - measured by tourist spending - its importance is quite low. In 1991, only 28% of total spending was attributed to excursionists.

Total tourist spending grew by nearly 100% during the eight years between 1983 and 1991. Although this indicates an increase in the average spending per visitor, which is of the order of 24%, it may be safe to say that by adjusting the figure for inflation in that period, one observes a decrease in real visitor spending.

Finally, it is interesting to note that growth in employment generation is not proportional to growth in the number of visitors: in the period referred to, employment grew at a rate equivalent to almost half that of the number of visitors.

iii. Hotel statistics

Table 16 reveals certain hotel statistics relating to the territory of the U.S. Virgin Islands. The statistics presented are generally significantly affected by the impact of Hurricane Hugo which lashed the islands in the latter part of 1989.

With regard to number of rooms available, it may be observed that after consistent annual growth up to 1989, in 1990 there was a significant decrease. Only Saint John experienced a significant increase from 863 to 926 rooms, moving from 16% of the total rooms available in 1989 to 21% in 1990.

Occupancy rates were on the decline up to 1989; there was however an interesting recovery in 1990 although the 1987 levels were never reached. The average stay between 1987 and 1988 was 5 nights per guest; the increase in 1989 to 5.4 nights was attributed to the large number of residents and visiting workers who occupied rooms after Hurricane Hugo, which previously would have been available to tourists. In 1990, the average stay fell to 4.5 nights.

The number of guests, as well as the number of nights/room increased in 1988 only to fall in 1989 and again in 1990.

iv. Tourist preferences

Table 17 presents the results of surveys carried out amongst visitors at the end of their stay regarding their preferences for the various attractions which the territory offers. A distinction is made between cruise ship passengers and those arriving by air. These surveys are carried out by the Economic Survey Bureau of the Department of Agriculture and Economic Development of the territory (1990a, 1990b).

The main preferences among cruise ship passengers, i.e. those chosen by more than 10% of passengers, are the climate, shopping, tours, the beach and the people, in that order. However, for tourists arriving by air, these same preferences were the beaches, the climate and the people.

At least 61% of the preferences expressed by visitors arriving by air and 51% of cruise ship passengers were linked to the natural attributes of the islands or to the nature-related activities. At the other extreme, 11% and 19% of preferences respectively, seemed to have nothing whatsoever to do with the natural beauty of the islands or with nature-related activities.

v. Tourism incentives

Promoters of tourism development projects could obtain tax exemptions, especially exemptions from income tax, for periods of 10 to 20 years. As was mentioned earlier, these exemptions are not automatic and must be requested from the industrial development commission; nevertheless, a certain acquired right to this exemption is recognized and if the project meets all the requirements under law, a request for exemption will not be refused.

V. References

1. Anderson, Susan (editor). New Investment and Development Opportunities in Tourism - The National Park System and Ecotourism. Papers presented to the Second Workshop on National Parks in Jamaica, June 18-19, 1992. Stencil. Jamaica, 1992.
2. Arzola Betancourt, Ricardo. Nuevas tendencias del turismo. Stencil of a transcript of a lecture in the Dominican Republic. August. 1992.
3. Bermúdez A., Fernando. Evolución del Turismo en las Areas Silvestres - Período 1982-1991. Stencil, Servicio de Parques Nacionales, Ministerio de Recursos Naturales, Energía y Minas. Costa Rica, 1992.
4. Bermúdez A., Fernando y Yadiria Mena (compilers). Parques nacionales de Costa Rica - 1992. Publication of the Servicio de Parques Nacionales, Ministerio de Recursos Naturales, Energía y Minas. Costa Rica, 1992.
5. Bonaire Marine Park. Cuadros estadísticos. Manuscript. Bonaire, 1992.
6. Bonaire Marine Park. Informaciones diversas. Information pamphlets. Bonaire, various years.
7. Bonaire Marine Park. Introduction of visitor fees - Background Paper. Stencil. Bonaire, 1991.
8. Bonaire Tourism Corporation. Tourism Statistics Reports. Stencil without title. Bonaire, 1992.
9. Bonaire Tourism Office. Structure Plan of Bonaire. Cited by the Bonaire Marine Park, 1991.
10. Boo, Elizabeth. Ecotourism: the potentials and pitfalls, World Wildlife Fund. USA, 1990.
11. Caribbean Tourism Organization. Eco-tourism - A CTO Market Guide. Stencil. Barbados. 1992.
12. Caribbean Tourism Organization. Papers presented at the Second Caribbean Conference on Ecotourism. Stencil. US Virgin Islands, 1992.
13. Caribbean Tourism Organization. First Caribbean Conference on Ecotourism, Belize July 9-12, 1991 - Recommendations. Stencil. 1991.
14. Ceballos Lascurain, Hector. Estudio de prefactibilidad socioeconómica del turismo ecológico y anteproyecto arquitectónico y urbanístico del Centro de Turismo Ecológico de Sian Ka'an, Quintana Roo. Mexico, 1987. (Cited by Elizabeth Boo, 1990).
15. Chacón Jiménez, Luis Manuel. Address of the Minister of Tourism of Costa Rica to the II International Symposium on Ecology, Tourism and Municipality. Stencil. Costa Rica, 1992.
16. Cifuentes, Miguel. Determinación de capacidad de carga turística en áreas protegidas. Technical Series, Informe técnico No.194, Centro Agronómico Tropical de Investigación y Enseñanza - CATIE. Costa Rica, 1992.
17. Dixon, John A. y Paul B. Sherman. Economics of Protected Areas - A New Look at Benefits and Costs. Document of the East-West Center. Island Press. USA, 1990.

18. Ecotourism Council of the US Virgin Islands. Meeting Drafts. 1991 y 1992.
19. Governor's Economic Development Committee. The Overall Economic Development Plan for the United States Virgin Islands - Executive Summary (Department of Economic Development and Agriculture). US Virgin Islands, 1992.
20. Holder, Jean S. Ecotourism - A fad or a way of life?. Paper presented to the First Caribbean Conference on Ecotourism. Belice, 1991.
21. Ingram, C. Denise y Patrick B. Durst. Nature Tourism as an Alternative Economic Opportunity for Wildlands Management and Rural Development: Marketing, Promotion, and Enterprise Development. Stencil without date.
22. Instituto Costarricense de Turismo. Anuario Estadístico de Turismo - 1991. Statistics from the Department of Development, ICT. Costa Rica, 1992.
23. Instituto Costarricense de Turismo. Ley de Incentivos para el Desarrollo Turístico - No. 6990. Informative pamphlet. Costa Rica, 1992.
24. Linberg, Kreg. Policies for Maximizing Nature Tourism's Ecological and Economic Benefits. Working document of the World Resources Institute. USA, 1991.
25. Maynard, C.A.. A perspective on Caribbean Ecotourism. Paper presented to the First Caribbean Conference on Ecotourism. Belice, 1991.
26. McNeely, Jeffrey A., James W. Thorsell y Hector Ceballos-Lascurain. Guidelines: Development of National Parks and Protected Areas for Tourism, IUCN for WTO and UNEP. Programme Activity Centre on Industry and Environment, UNEP, UNEP technical reports series No.13. Joint Publication WTO/UNEP. 1992.
27. Ministry of Natural Resources, Energy and Mining of Costa Rica. Memoria Anual 1991-1992. Costa Rica, 1992a.
28. Ministry of Natural Resources, Energy and Mining of Costa Rica. MIRENEM. Newsletter, vol.1, year 1. Costa Rica, 1992b.
29. Ministry of Natural Resources, Energy and Mining of Costa Rica. Reglamento General para los Comités Regionales de las Areas de Conservación. Manuscript, Servicio Nacional de Parques. Costa Rica, 1992c.
30. Ministry of Natural Resources, Energy and Mining of Costa Rica. Sistema Nacional de Areas de Conservación - Un nuevo enfoque Report. Costa Rica, 1992d.
31. Norris, Ruth. Can Ecotourism Save Natural Areas?. National Parks publication, January/February, 1992. USA, 1992.
32. Reubold, Kalli y Tom van't Hof. Revitalisation of the Bonaire Marine Park. Report. Bonaire Marine Park. Bonaire, 1991.
33. Southworth, Sara T.. "Ecotourism case by case" in Travel World News, Monthly publication for travel agents. USA, May 1993.
34. Saint Thomas and Saint John Hotel Association. St.Thomas-St.John Vacation Handbook. U.S.V.I., 1993

35. Thelen, Kyran y Arne Dalfelt. Políticas para el manejo de áreas silvestres. Serie de Educación Ambiental No.1, Editorial Universidad Estatal a Distancia. 1979 Costa Rica.
36. Tourism Task Force. Tourism Task Force Report - United States Virgin Islands. Informe. Islas Vírgenes de EE.UU., 1991.
37. UNEP Regional Co-ordinating Unit. Caribbean Environment Programme. Relevant documents of the Protocol and Regional Programme on Specially Protected Areas and Wildlife in the Wider Caribbean Region. Jamaica, 1991 and 1992.
38. U.S.V.I. Department of Economic Development & Agriculture. Air Visitors. U.S. Virgin Islands 1989 Visitor Exit Survey. Summary Report. Prepared by the Bureau of Economic Research. U.S.V.I., 1990a.
39. U.S.V.I. Department of Economic Development & Agriculture. Cruise Survey. U.S. Virgin Islands 1989 Visitor Exit Survey. Summary Report. Prepared by the Bureau of Economic Research. U.S.V.I., 1990b.
40. U.S.V.I. Department of Economic Development & Agriculture. Hotel Occupancy Statistics. U.S. Virgin Islands - 1987 to 1990. Summary Report. Prepared by the Bureau of Economic Research. U.S.V.I., 1991.
41. U.S.V.I. Department of Economic Development & Agriculture. National Park Visitor Report - St. John, U.S. Virgin Islands. Bureau of Economic Research. U.S.V.I., 1993.
42. U.S.V.I. Department of Economic Development & Agriculture. U.S. Virgin Islands Annual Tourism Indicators. Statistics prepared by the Bureau of Economic Research. U.S.V.I., 1992.
43. Venezuela Tourism Corporation. Venezuela y el turismo ecológico. Stencil of the "Dirección del Situado y Equipamiento Turístico". 1992.
44. Whelan, Tensie (editor). Nature Tourism - Managing for the Environment. Island Press. Estados Unidos, 1991.

Suggested Reading

1. Forestry Private Enterprise Initiative. (FPEI). Several documents on ecotourism promotion by Durst, Laarman, Ingram & Wilson. For further information contact: FPEI, P.O.Box 12254, Research Triangle Park, NC 27709, USA.
2. Inter American Tourism Institute. The Institute has undertaken relevant research in ecotourism such as El motivo de compra del usuario turístico, Aplicación del marketing estratégico al turismo & Ecoturismo. For further information contact: Inter American Tourism Institute, P.O.Box 20043, Washington, D.C. 20043, USA.
3. McKinsey & Company jointly with the Nature Conservancy, the World Wildlife Fund and the Ford Foundation undertook a study on ecotourism between November 1991 and March 1992. The research involves Dominica, Jamaica, Puerto Rico and the US Virgin Islands. Deborah Arcoleo presented a summary of this research to the 2nd Caribbean Conference on Ecotourism (1992). For further information contact McKinsey & Company, 55 E 52nd. Street, New York.

4. Miller, Marc L. y Jan Auyong, editors of the Proceedings of the 1990 Congress on Coastal and Marine Tourism - A Symposium and Workshop on Balancing Conservation and Economic Development, 2 vol. Event convened in Hawai, May 1990. National Coastal Resources Research & Development Institute, Newport, Oregon, USA.
5. Organization of the American States, Washington. The OAS has been working with tourism for a long time and has generated several reports relevant to the Wider Caribbean. Additionally, for the 1992-1993 period, has scheduled activities on international co-operation for tourism development as well as a number of multinational projects in the following Caribbean: Antigua and Barbuda, Barbados, Dominica, Jamaica, St. Kitts y Nevis, St. Lucia, St. Vincent & the Grenadines, and Trinidad & Tobago
6. The PANOS Institute. Towards a Green Central America, published in 1993. 1717 Massachusetts Avenue, NW, Suite 301, Washington, D.C. 20036, USA.

ANNEX I

Table 1: Macroeconomic impact of tourism, hotel capacity and annual visitor arrivals

Country/ Territory	Contribution by tourism sector			Hotel capacity				
	GDP	Employment	F/X Division	Rooms	Occup. rates	All incl. resorts	Number of Visitors	
	(%)	(%)	(%)	(No.)	(%)	(No.)	Annual	High Season
Antigua/Barbuda	60.0	NI	NI	NI	NI	7	193,584	85,774
Bahamas	55.0	60.0	75.0	12,800	55.0	5	3,600,000	1,600,000
Barbados	12.0	20.0	60.0	(c)	50.0	0	394,000	104,701
Belize	NI	NI	NI	2,913	NI	57	215,442	115,720
Colombia	1.5	(a)	(a)	43,072	55.8	0	856,000	NI
Costa Rica	7.5	2.5	25.0	13,075	50.0	(d)	580,346	377,225
Dominican Rep (b)	11.5	(b)	45.0	24,500	69.0	NI	100,000	60,000
Guyana	15.0	NI	NI	1050	40.0	10	NI	NI
Martinique	5.0	4.2	NI	6,600	55.0	(g)	751,000	409,000
Mexico	3.0	NI	35.0	150,376	54.4	(e)	(e)	NI
St. Vincent/Gren.	4.6	10.0	NI	1,109	NI	0	155,000	97,000
Suriname	NI	NI	NI	NI	NI	NI	NI	NI
Turks & Caicos	50.0	25.0	NI	1,125	50.0	1	56,000	NI
Venezuela	13.1	21.3	NI	28,271	67.7	NI	598,328	244,444

NI No information

(a) 130,000 directly employed; US\$440 million in foreign exchange earnings

(b) 50,000 directly employed; US\$1,200 million in foreign exchange earnings

(c) 11,700 beds

(d) 192 tourist resorts; 10% all-inclusive

(e) Figures illegible on fax. Nevertheless, according to other sources, Mexico receives 5-6 million visitors annually.

(f) 50-60,000 visitors during high season and 30-40,000 during low season. These figures do not correspond with the annual total.

(g) 40% during high season and 23% during low season.

Table 2: Ecotourism: Concepts and definitions

Country/Territory	Concepts in use	Definition
Antigua and Barbuda	----	No definition of concept given
Bahamas	Ecotourism	The promotion of the territory's ecosystems and the increase in public awareness of the sensitivity of the natural environment, strengthening conservation efforts and the use of resources.
Barbados	Ecotourism Ecological tourism Others	Hikes and other organized nature trips to botanical gardens, caves and other natural attractions
Belize	Ecotourism	Controlled tourism, mindful of environmental damage, centred on nature and archaeological ruins.
Colombia	Ecotourism Ecological tourism	Type of tourism where the aim is to visit areas where nature has been kept relatively intact, in order to study, admire, observe and appreciate the flora, fauna and landscape as well as any other cultural expression. Small-scaled, controlled and managed educational/recreational activity.
Costa Rica	Ecotourism Ecological tourism	Commercialization of the concept of ecological tourism. Activity involving the enjoyment, study and conservation of a country's natural resources.
Dominican Republic	Ecotourism Alternative tourism Ecological tourism Adventure tourism	Developed in highly attractive natural and protected areas, producing immediate benefits, ensuring intelligent use of resources with tourism potential, in areas with few options for development, favouring some economic activity and encouraging conservation awareness. Receptive. At the local level bird watching, etc. Horseback, riding, sailing, diving.

Table 2: Ecotourism: Concepts and definitions (Cont.d)

Country/Territory	Concepts in use	Definition
Guyana	Ecotourism	Emphasizes care in not altering any section of the ecosystem but provides economic benefits as incentives to conserving the environment.
	Alternative tourism	Emphasis on culture and sports.
Martinique	Ecotourism Alternative tourism Ecological tourism Others	Visits to protected areas or areas of interest ecologically speaking and/or for its landscapes. Nature-related activities such as horseback riding, golf, etc.
Mexico	Ecotourism	Activity in natural environment subject to guidelines on the preservation of nature and natural resources, generally accompanied by a practical application programme and/or environmental education.
St. Vincent and the Grenadines	Ecotourism	Activity allowing the local population to generate income from their ecotourism resources while protecting them.
Suriname	Ecotourism	Tourism in protected areas; bird watching
Turks and Caicos	Ecotourism Ecological tourism	No definition of concept given.
Venezuela	Ecotourism Ecological tourism	Excursions to natural areas in order to understand the cultural and natural history of the environment without altering the integrity of the ecosystem while providing economic opportunities for the local inhabitants thus making conservation work in their favour.

Table 3: Protected Terrestrial Areas

Country/ Territory	Current Situation					Proposal			
	Total Area		Ecotourism Destination		Attractions	Total Area		Ecotourism Destination	
	No.	Surf. (Km ²)	No.	Surf. (Km ²)		No.	Surf. (Km ²)	No.	Surf. (Km ²)
Antigua and Barbuda ¹	2	45	2	39	Natural Cultural Historical	1	6	1	NI
Bahamas	5	4,644	4	4,594	Flora/Fauna ²	12 ³	NI	0	-
Barbados	0	0	0	0	-	3	NI	NI	Natural Archeological
Belize	31	4,759	31	4,759	Archeological Natural	13	192	13	192
Colombia	35	87,693	21	33,584	Natural Archeological Anthropological	0	-	0	-
Costa Rica ⁴	27	11,600	13	1,200	Natural Geological Beaches Cultural Historical	0	-	0	-

¹ Antigua and Barbuda have provided, in a separate text, some useful information on the status of protected areas and being considered for protection

² Although the fauna is the most spectacular attraction, it is only moderately promoted because of the extreme sensitivity of the areas and/or because they lack the proper conditions required for intense tourism.

³ The Bahamas has provided, separately, information on the development of its system of national parks for which 52 areas have been identified corresponding to different categories of conservation and covering an area of approximately 15,200 Km². These are predominantly marine and coastal areas.

⁴ There are discrepancies in the case study figures.

Table 3: Protected Terrestrial Areas (Cont.d)

Country/ Territory	Current Situation				Proposal			
	Total Area		Ecotourism Destination		Total Area		Ecotourism Destination	
	No.	Surf. (Km ²)	No.	Surf. (Km ²)	No.	Surf. (Km ²)	No.	Surf. (Km ²)
Dominican Republic ⁵	8	2,808	5	2,294	4	NI	NI	NI
Guyana	1	NI	NI	NI	4	NI	NI	NI
Martinique	1	4	0	-	1	19	0	-
Mexico ⁶	71	67,661	6	32,861				
St. Vincent & Grenadines	0	-	-	-	2	NI	4	NI
Suriname	9	6,526	2	866	4	1,320	NI	NI
Turks and Caicos Islands	4	1	2	1	0	-	-	-
Venezuela	202	633,487	38	73,440	0	-	-	-

NI No information

⁵ Proposal of a larger number of areas to be protected, with various projects and attractions.⁶ Only includes federal protected areas.

Table 4: Coastal protected areas

Country/Territory	Current Situation						Proposal					
	Total area		Ecotourism Destination		Attractions	Total area		Ecotourism Destination		Attractions		
	No.	Surf. (km ²)	No.	Surf. (km ²)		No.	Surf. (km ²)	No.	Surf. (km ²)			
Antigua/Barbuda ¹	0	0	0	0	Natural	0	0	0	0	0		
Bahamas ²	7	2,869	4	2,869	Natural	45 ³	NI	12-15 ⁴	NI	NI		
Barbados	0	0	0	0	0	1	NI	NI		Coastline lakes and dunes		
Belize	5	884	5	884	Mangroves, fauna	5	0	5	0	Estuaries, valleys, rivers		
Colombia	5	1,770	5	1,770	Mangroves, Coral reefs, Wetlands, Beaches, Sites of landscapes, Sites of archaeological, anthropological and cultural interest	0	0	0	0	0		
Costa Rica ⁵	9	5,600	9	350	Coral reefs, Wetlands, Beaches, fauna	0	0	0	0	0		
Dominican Republic	6	1,397	5	NI	Coral reefs, Cays, Beaches, Wetlands, Caves, Fauna, Birds, Landscapes, Sites of archaeological, and scientific interest	0	0	0	0	0		
Guyana	0	0	0	0	0	1	NI	NI	NI	Sea turtles		
Martinique	0	0	0	0	0	1	0	0	0	Natural Bird watching		

Table 4: Coastal protected areas (Cont.d)

Country/Territory	Current Situation					Proposal				
	Total area		Ecotourism Destination		Attractions	Total area		Ecotourism Destination		Attractions
	No.	Surf. (km ²)	No.	Surf. (km ²)		No.	Surf. (km ²)	No.	Surf. (km ²)	
Mexico	6	31,908	3	NI	Flora/fauna Migratory birds. Land-scapes Archaeological sites	0	0	0	0	0
St. Vincent & the Grenadines	0	0	0	0	0	0	0	0	0	0
Suriname	6	1,511	2	160	Migratory birds, Fauna, Sites of cultural and archaeological interest	1	1,900	NI	NI	Birdlife fauna
Turks and Caicos	24	693	3	2	Fauna, beaches, Excursions, Underwater sports, Cultural sites	0	0	0	0	0
Venezuela	28	31,000	10	4,321	Ecological diversity, Coastal formations, Flora/fauna	0	0	0	0	0

¹ Antigua and Barbuda have provided, in a separate text, some useful information on the status of its protected areas and on areas being considered for protection. The information on coastal protected areas is illegible on the fax.

² Includes both coastal and marine protected areas.

³ The Bahamas has provided, separately, information on the development of its system of national parks for which 52 area have been identified corresponding to different categories of conservation and covering an area of approximately 15,200 km². These are predominantly marine and coastal areas.

⁴ Private property and commercial activities that are not formally integrated in an official promotional programme.

⁵ There are discrepancies in the case study figures.

⁶ Indicates a group of areas which have been recommended for protection.

Table 5: Marine protected areas

Country/ Territory	Current Situation				Proposal			
	Total Area		Ecotourism Destination		Total Area		Ecotourism Destination	
	No.	Surf. (Km ²)	No.	Surf. (Km ²)	No.	Surf. (Km ²)	No.	Surf. (Km ²)
Antigua and Barbuda	2	25	NI	NI	1	6	1	6
Bahamas ^(a)	---	---	---	---	---	---	---	---
Barbados	1	NI	NI	NI	---	---	---	---
Belize	3	2	3	2	(b)	---	---	---
Colombia	2	687	2	687	---	---	---	---
Costa Rica ^(c)	10	3,139	NI	NI	---	---	---	---
Dominican Republic ^(d)	---	---	---	---	---	---	---	---
Guyana	---	---	---	---	---	---	---	---
Martinique	---	---	---	---	1	1	---	Natural
Mexico	5	2,276	2	1,502	2	NI	NI	NI
St. Vincent & Grenadines	---	---	---	---	1	NI	1	NI
								Cays

Table 5: Marine protected areas (cont.)

Country/ Territory	Current Situation				Proposal			
	Total Area		Ecotourism Destination		Total Area		Ecotourism Destination	
	No.	Surf. (Km ²)	No.	Surf. (Km ²)	Attractions	No.	Surf. (Km ²)	Attractions
Suriname	--	--	--	---	---	---	---	---
Turks & Caicos Islands	4	31	4	31	Underwater sports Recreational fishing Water sports	0	---	---
Venezuela	5	4,394	3	3,482	Mangroves Flora/Fauna Coral reefs Submarine grasslands Underwater sports Recreation fishing	---	---	---

NI No information

- (a) See corresponding note on the Bahamas at the end of Table 4.
 (b) Several sites under study but as yet there are no formal plans to increase the number of marine protected areas.
 (c) Number of wilderness areas administered by the National Parks Service with extension into marine areas.
 (d) The response refers to the same areas indicated for coastal zones.

Table 6: Non-protected areas

Country/Territory	Land-Based		Coastal		Marine	
	No.	Visitors/yr	No.	Visitors/yr	No.	Visitors/yr
Antigua & Barbuda	1	---	1	---	4	---
Bahamas (a)	---	---	---	---	---	---
Barbados	3	280,000	1	NI	0	---
Belize	(b)	---	(b)	---	(b)	---
Colombia	NI	NI	NI	NI	NI	NI
Costa Rica	NI	NI	NI	NI	NI	NI
Dominican Rep.	5	12,000	7	304,000	NI	NI
Guyana	NI	NI	NI	NI	NI	NI
Martinique	Many	---	Many	---	0	---
Mexico	NI	NI	NI	NI	1	NI
St. Vincent/Gren.	3	NI	1	NI	0	---
Suriname	2	NI	1	NI	0	---
Turks & Caicos	NI	NI	NI	NI	NI	NI
Venezuela	6	NI	NI	NI	NI	NI

NI No information

(a) The Bahamas states that figures were increasing at the time of the survey.

(b) Ecotourism activities are carried out in practically the entire country and it would be almost impossible to identify all the non-protected areas where these type of activities take place.

Table 7: Visitor arrivals

Country/Territory	Responses
Antigua and Barbuda	The sites most frequently visited are Devil's Bridge (the most photographed, a rock formation), coral reefs (mostly visited by underwater tourism operators), etc.
Bahamas	No information
Barbados	No information
Belize	No information
Colombia	No information
Costa Rica	280,000 local tourists and 318,000 foreign tourists visited protected areas in 1992.
Dominican Republic	Approximately 389,000 annual visitors to areas of interest, islands with clean beaches, cays, sectors with a high level of biodiversity and unique geological formations.
Guyana	A number of sites, to which many tours are organized, have been designated tourist zones.
Martinique	Most frequently visited site - ruins of Saint Pierre, patrimony of humanity, where a volcanic eruption caused 30,000 deaths in 1902.
Mexico	No information
St. Vincent & the Grenadines	Most frequently visited areas: Botanical Gardens (easy access), waterfalls (highly promoted) and cays (attractive to excursionists).
Suriname	No information
Turks and Caicos	Attractions generating a lot of interest: tropical rain forest, birdlife, monkeys, waterfalls and granite mountains.
Venezuela	The most frequently visited areas are those geared towards ecotourism whose main attraction is the wildlife, especially birds.

Table 8: Legal and institutional aspects (Section VIII of the survey)

Country/ Territory	Organizations Involved in Ecotourism	Guidelines for tourism and the environment	Economic policy instruments affecting ecotourism or related activities
Antigua and Barbuda	- National Park Authority	- None	- None
Bahamas	- Bahamas National Trust - Domestic Tourist Unit - Ministry of Tourism - Friends of the Environment - Bahamas Chamber of Commerce	- None	- No information
Barbados	- National Conservation Commission - Barbados National Trust	- Controls on coastal development - Zonification of drinking water sources	- No information
Belize	- Belize Tourist Industry - Belize Tourist Board - Ministry of Tourism and the Environment	- Ministry of Tourism and the Environment - Declaration on Policy and Strategy	- No information
Colombia	-INDERENA - National Tourist Corporation - National Tourist Board (Ministry of Development)	- Policies and directives on the development of ecotourism currently under study	- None
Costa Rica	- Ministry of Natural Resources and Mining - Costa Rica Tourist Institute - National Tourist Board	- Environment Code - Law on Conservation areas	- None
Dominican Republic	- National Parks Commission (Ecotourism Department) - Ministry of Tourism - ECOTURISA, Ecotourism Tour operators	- Ministry of Tourism Territorial Tourism Plan (1990) - not yet in force - In the process of elaborating guidelines on protected areas (Ecotourism Department)	- No information
Guyana	- Ministry of Trade, Tourism and Industry - Tourism Association of Guyana, Ltd.	- Environment Policy - Environment Protection Act (proposed)	- Financial incentives to promote tourism development

Table 8: Legal and institutional aspects (Cont.d)

Country/ Territory	Organizations Involved in Ecotourism	Guidelines for Tourism and the Environment	Economic Policy Instruments Affecting Ecotourism or related activities
Martinique	-French Institutions	- French Regulations Instruments - General Law on Ecological Balance and Environmental Protection	- None
Mexico	- Ministry of Tourism - FONATUR - Friends of Sian Ka'an, A.C. - PRONATURA	- General Law on Ecological Balance and Environmental Protection	- None
St. Vincent & the Grenadines	- St. Vincent and the Grenadines National Trust - Department of Tourism Group - Forestry Division	- Forest Resource Conservation Act #47, 1992 - Wildlife Protection Act #16, 1987	- Import tax waivers on construction ma- terial and equipment and incentives for hotels
Suriname	- Foundation for Nature Conservation (STINASU) - Organization for the Exploitation of Tourist Areas (METS) - Ministry of Transport, Communications and Tourism - Suriname Airlines in collaboration with METS	- Law on Nature Conservation (creation and management of protected areas)	None
Turks and Caicos Islands	- Department of Environment, Heritage and Parks - Tourist Department - Fisheries Department - PRIDE & National Trust (NGO)	- Legislation on National Parks, in force since 1992	None
Venezuela	- MARNR (inparques) - Corpoturismo - Various NGOs; Audubon Asotucanes, BIOMA and Fundación Paria	- Plans for the management and regulations of national parks and areas of tourism interest - Special regulations such as those on camps in the Amazons - General Laws; Organic and Penal Laws on the Environment and the Tourism Law	None

Table 9: Planning

Country/ Territory	Development plans including environmental protection, tourism and ecotourism	Plans for the development of areas with ecotourism as an important component
Antigua and Barbuda	Spatial development project including environmental protection formulated with support from UNEP	Development of the Island's Marine Reserve for Birds and the Wildlife Sanctuary in the context of the Parham Urban Development Project
Bahamas	There are plans; no details received	There are plans; no details received
Barbados	None	Network of protected areas in the process of development within the context of a growing national conservation strategy
Belize	No information	No information
Colombia	The Environment is gaining more importance in the planning process. Ecotourism has become an important aspect of the creation and management of protected areas.	A study is being done of protected areas where ecotourism can be vital for regional development
Costa Rica	Regional management plans. Initiatives by the Costa Rica Tourism Institute	In particular, the conservation plan for Guanacaste
Dominican Republic	Environmental protection is being considered, at the request of the Environmental Technical Commission, in tourism development, in management plans for parks, etc.	The development of areas devoted to ecotourism is being promoted by the private sector (Ecotourisa)
Guyana	No information	No information
Martinique	No information	No information
Mexico	The Director General's Office for Ecological Planning (SEDESOL) and the tourism and fisheries sectors, among others, are promoting ecological management projects in coastal and other regions possessing the potential for tourism activities in order to blend such activities into the natural environment	The development of ecotourism in certain areas has been promoted in some ecological management plans. (The case of the Bufadora region)
St. Vincent and the Grenadines	None	Studies have been done on the Caves in Tobago
Suriname	Management plans for some protected areas have been done and plans for others are being prepared	A natural reserve and a multiple-use area have been identified
Turks and Caicos	National Physical Development Plan; Insular Development Plan; Tourism Development Plan	None
Venezuela	Sustainable Plan for Tourism and Recreation in the Venezuelan Amazons; the Llanos Ecotourism Plan (to be implemented)	An environmental tourism centre is to be integrally planned for a rural area, a national park and an animal shelter

Table 10: Bases for the development of ecotourism

Priority Requirements for the Sustainable Development of ecotourism ^{1/}	National facilities and/or experience for training in ecotourism	Achievements and/or deficiencies attributable to ecotourism at the national, regional and municipal levels	
		Achievements	Deficiencies
Antigua and Barbuda With the exception of hotel facilities all other factors are in place (not in any order)	The facilities and the experience for training in ecotourism are not available but a future demand is foreseeable in this area. There are no plans in this respect	No information	No information
Bahamas Information Legislation Institutionalization	The facilities and the experience are not available for ecotourism but a future demand is foreseeable in this area. There are no plans in this respect.	No information	No information
Barbados Institutionalization Legislation Qualified personnel	No information	- Diversification of the Tourism Industry - Appreciation of resource conservation - Increased respect for the natural and cultural environments	- Risk of degradation through overload
Belize No information	No information	No information	No information
Colombia Legislation Incentives Infrastructure Qualified personnel	No capacity nor experience in training in ecotourism there is a demand for this and there are plans to address this	- Appreciation of the value of protected areas - Information dissemination - Generation of employment and economic benefits	- Poor efficiency in institutional tourism management - Lack of adequate planning
Costa Rica Infrastructure facilities Qualified personnel;	Capacity and experience for training in ecotourism exist. A future demand for training in anticipated programmes are being planned to this end	None as yet	None as yet. Measures are being hotel taken to avoid negative effects
Dominican Republic Infrastructure Economic Incentives Hotel facilities	No information	No information	No information

1/ The following factors were numbered 1-3 in order of priority:

Hotel facilities	Information	Transport/Communication	Legislation	Equipment
Qualified staff	Infrastructure	Incentives	Institutionalization	

Table 10: Bases for the development of ecotourism (Contd.)

Priority Requirements for the Sustainable development of ecotourism	National facilities and/or experience for training in ecotourism	Achievements and/or deficiencies attributable to ecotourism at the national, regional and municipal levels	
		Achievements	Deficiencies
Guyana Infrastructure Transport/Communication Hotel Facilities	No information	No information	No information
Martinique No information	No information	No information	No information
Mexico Infrastructure Incentives Institutionalization	No capacity nor experience for training in ecotourism. A future demand is anticipated and there are plans to address this	- Species protection (grey whale, queen butterfly) - Development of support programmes for indigenous communities in protected areas - Awareness of resource conservation	No evidence of this
St. Vincent & Gren. Hotel facilities Infrastructure Transport/Communication	No capacity for nor experience in training in ecotourism but a future demand is anticipated and plans are underway to address this	Generally well accepted	Displacement of local community (case of the Tobago Cays)
Suriname Institutionalization Qualified staff Transport/Communication	No information	No information	No information
Turks and Caicos Infrastructure Qualified staff Legislation	Training - a need that can be satisfied through institutional workshops	Only mentioned risks associated	with tourism which is 100 % ecotourism
Venezuela Institutionalization Information Qualified staff	Capacity and experience in training in ecotourism. Future demand for training envisaged; there are plans to address this demand	Only relative public and private interest in ecotourism development	- National Parks do not have sufficient funds to ensure proper service - Inadequate permit-training procedure; lack of effective control

Table 11: Protected Wildlands in Costa Rica

Categories of protected wildlands	Number	Area (hec.)
National parks	18	
- land areas		479,403
- marine areas		313,890
Biological reserves	7	17,653
National monuments	1	218
Forest reserves	9	303,385
Defence zones	28	159,873
Wildlife sanctuaries	8	125,583
National forests	1	900
Total	72	1,400,905

Source: Ministry of Natural Resources, Energy and Mines, 1992.

Table 12: International Tourist Arrival in Costa Rica according to zones and countries 1989-1991

Zones and Countries ^{1/}	1989		1990		1991		Increment Period
	No.	%	No.	%	No.	%	%
TOTAL	375,951	100	435,037	100	504,649	100	34.2
NORTH AMERICA	153,112	41	191,284	44	223,126	44	45.7
Canada	20,285	5	30,892	7	37,187	7	83.3
United States	124,264	33	150,224	35	173,626	34	39.7
Mexico	8,563	2	10,168	2	12,313	2	43.8
CENTRAL AMERICA	135,376	36	139,913	33	164,809	33	21.7
Guatemala	14,977	4	14,695	3	16,079	3	7.4
El Salvador	8,359	2	8,986	2	11,299	2	35.2
Honduras	10,066	3	8,894	2	10,475	2	89.5
Nicaragua	38,812	10	49,395	15	73,558	15	(15.5)
Panama	63,162	17	57,943	11	53,398	11	
CARIBBEAN	4,387	1	4,679	1	4,679	1	6.7
Cuba	1,299	0	1,421	0	1,578	0	21.5
Dominican Republic	2,048	1	1,959	0	2,310	0	12.8
Jamaica	486	0	318	0	308	0	(36.6)
Trinidad and Tobago	207	0	160	0	121	0	(41.5)
Others	347	0	334	0	362	0	4.3
SOUTH AMERICA	28,644	8	32,575	7	32,891	7	14.8
Colombia	9,612	3	10,687	2	10,480	2	9.0
Venezuela	2,955	1	3,771	1	4,025	1	36.2
Argentina	2,785	1	3,170	1	3,359	1	20.6
Others	13,292	4	14,947	3	15,027	3	13.1
EUROPE	45,355	12	57,177	13	67,319	13	48.4
Spain	5,997	2	7,541	2	8,206	2	36.8
Germany	9,122	2	13,383	3	16,861	3	84.8
Netherlands	5,835	2	6,259	1	6,782	1	16.2
Italy	4,837	1	6,277	1	7,504	1	55.1
U.K.	5,094	1	5,692	1	6,570	1	29.0
France	3,726	1	4,783	1	5,445	1	46.1
Others	10,744	3	13,242	3	15,951	3	48.5
ASIA	7,423	2	8,272	2	9,046	2	21.9
Japan	n/d	--	n/d	--	3,413	1	--
China	n/d	--	n/d	--	1,752	0	--
Korea	n/d	--	n/d	--	1,016	0	--
Russia	n/d	--	n/d	--	688	0	--
Israel	n/d	--	n/d	--	1,100	0	--
Others	n/d	--	n/d	--	1,097	0	--
AFRICA	171	0	244	0	299	0	74.9
OTHER ZONES	1,483	0	1,380	0	2,480	0	67.2

N/D Data not available

Source: Costa Rican Tourism Institute, 1992.

^{1/} Zones and groups of countries taken from source.

Table 13: International Tourist arrivals in Costa Rica according to zones, 1992-1991 ¹

Year	North America	Central America	Caribbean	South America	Europe	Other Zones ²	Total
1982	82,591	214,281	5,959	30,334	32,206	6,211	371,582
1983	84,762	173,844	7,425	23,112	31,740	5,259	326,142
1984	88,360	126,474	5,055	20,432	28,516	5,064	273,901
1985	89,825	112,623	4,294	20,915	28,179	5,716	261,552
1986	93,105	106,825	3,957	21,272	29,026	6,655	260,840
1987	104,841	108,543	3,438	21,768	32,354	6,917	277,861
1988	123,551	124,728	5,103	26,150	41,396	8,458	329,386
1989	153,112	135,376	4,387	28,644	45,355	9,077	375,951
1990	191,284	139,913	4,192	32,575	57,177	9,896	435,037
1991	223,126	164,809	4,679	32,891	67,319	11,825	504,649

Accumulative annual growth rate: ³

91/82	11.7	(2.9)	(2.7)	0.9	8.5	7.4	3.5
86/82	3.0	(16.0)	(9.7)	(8.5)	(2.6)	1.7	(8.5)
91/86	19.1	9.1	3.4	9.1	18.3	12.2	14.1

Source: Costa Rican Tourism Institute, 1992

¹ The data does not include stop-over tourists arriving on cruise ships.

² Includes Africa and other regions of the world.

³ The rates calculated include only the extreme years of each series.

Table 14: Tourism in Costa Rica and visits to National Parks

Year	Visits to National Parks					Total intl. tourist arr. in Costa Rica ^{1/} (D)	Percentage Relation C/D
	Total (A = B + C)	Nationals (B)		Foreigners (C)			
		(No.)	(No.)	%	(No.)	(%)	
1982	205,640	140,262	68.2	65,378	37.8	371,582	17.6
1983	194,402	134,136	69.0	60,266	31.0	326,142	18.5
1984	134,063	170,101	72.7	63,962	27.3	273,901	23.4
1985	245,662	182,161	74.2	63,501	25.8	261,552	24.3
1986	261,967	191,911	73.3	70,056	26.7	260,840	26.9
1987	287,047	215,324	75.0	71,723	25.0	277,861	25.8
1988	360,222	235,512	65.4	124,710	34.6	329,386	37.9
1989	394,742	228,206	57.8	166,536	42.2	375,951	44.3
1990	453,033	240,036	53.0	212,997	47.0	435,037	49.0
1991	496,406	222,975	44.9	273,431	55.1	504,649	54.2

Accumulative annual growth rate: ^{2/}

91/82	10.3	5.3	17.2	3.5	13.3
86/82	6.2	8.2	1.7	(8.5)	11.2
91/86	13.6	3.0	31.3	14.1	15.1

^{1/} The data does not include stop-over tourists arriving on cruise ships.^{2/} The rates calculated include only the extreme years of each series.Source: National Parks' Services (MINEREM), 1992
Costa Rican Tourism Institute, 1992

Table 15: Tourist indications for the Virgin Islands 1980-1991

Year	Visitors (a) (in thousands)			Expenditure (millions US\$)			Cruise Ships (b)	General Empl.
	Total	Tourist	Excurs.	Total	Tourists	Excurs.	No.	No.
1983	1,213.7	345.0	868.7	356.3	263.1	93.2	715	6,890
1984	1,264.8	369.5	895.3	440.1	308.8	131.3	789	7,190
1985	1,315.5	411.6	903.9	507.4	365.4	142.0	790	7,620
1986	1,654.4	463.1	1,191.3	509.5	386.6	122.2	1109	8,390
1987	1,917.8	541.8	1,376.0	639.4	401.4	238.0	1242	9,580
1988	1,881.4	555.5	1,325.9	659.6	411.6	248.0	1121	9,800
1989	1,764.0	506.7	1,257.3	673.7	497.6	176.1	1106	9,320
1990	1,866.4	521.5	1,344.9	704.4	515.6	188.8	1142	8,640
1991	1,942.7	511.8	1,430.9	708.1	506.3	201.8	3240	8,830

Growth rate over the period (c):

Total	60.1	48.3	64.7	98.7	92.4	116.5	73.4	28.2
Annual	6.1	5.1	6.4	9.0	8.5	10.1	7.1	3.1

(a) Tourists and excursionists are those who stay more than 24 hours or less, respectively.

(b) Those docking at St. Thomas and/or St. John.

(c) The accumulative annual growth rate between the extreme years of a series.

Source: *Economic and Agricultural Development Secretariat (1992)*

Table 16: Main Hotel Statistics. 1987-1990

Concept	1987	1988	1989	1990
Rooms available:				
- Territory	5,162	5,291	5,478	4,466
- St. Thomas/St. John	3,686	3,848	4,026	3,286
- St. John	861	862	863	926
Night occupancy:				
- Territory	1,206,540	1,225,713	1,095,910	933,832
- St. Thomas/St. John	868,814	881,127	766,109	745,432
Number of guests:				
- Territory	578,296	699,77	634,004	471,868
Occupancy Level (%):				
- Territory	64.2	62.3	60.9	63.0
- St. Thomas/St. John	65.1	62.1	59.8	62.3
Permanence:				
- Territory	5.0	5.0	5.4	4.5

Source: *Economic and Agricultural Development Secretariat, 1991.*

Table 17: Visitor preference - 1989

Categories	Visitors arriving by air	Tourist cruise ship passengers
Beaches and sea	21.9	12.1
Climate	18.0	18.5
People	.9	11.3
Island tours	5.8	12.2
Diving	5.7	2.2
Relaxation	5.7	3.5
The island in general	4.8	5.5
Everything	4.0	7.8
Sport sailing	3.8	0.1
Shopping	3.1	16.6
Accommodation	2.6	0.1
Restaurants/meals	2.5	1.2
Visits to relatives/friends	2.4	0.1
Recreation	0.5	0.2
National parks	0.4	0.0
Bars and nightclubs	0.4	0.7
Fishing	0.2	0.0
Urban areas	0.1	0.5
Others	7.4	7.1
No preference	0.8	0.2
Adjustment	--	0.1
Total	100.00	9.9

Source: *Economic and Agricultural Development Secretariat (1990a, 1990b)*

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The series of CEP Technical Reports contains selected information resulting from the various activities performed within the framework of the UNEP Caribbean Environment Programme (CEP). CEP was initiated in 1976 by UNEP with the assistance of ECLAC, at the request of the Governments of the region. A framework for regional projects and activities was first formulated in Montego Bay in 1981, when the Action Plan for the Caribbean Environment Programme was adopted by the First Intergovernmental Meeting.

The major legal instrument of CEP was adopted at the Second Intergovernmental Meeting, convened at Cartagena de Indias, in 1983: the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region. The Cartagena Convention provides a framework for the development of specific protocols.

The implementation of CEP is supported mainly by the Caribbean Trust Fund, established by the participating States and Territories. Their active participation is ensured through regular Intergovernmental and Contracting Parties Meetings, a rotating Monitoring Committee formed by representatives from nine States and Territories and through the National Focal Points. The principal focal point in each State or Territory is the ministry or department responsible for external relations or foreign affairs. Additionally, the agency responsible for the management of marine and coastal resources is the focal point for technical purposes.

Currently the Action Plan of CEP concentrates in six major areas for the management of marine and coastal resources: Overall Co-ordination, Specially Protected Areas and Wildlife (SPA), Assessment and Control of Marine Pollution (CEPPOL), Integrated Planning and Institutional Development (IPID), Information Systems (CEPNET), and Education, Training and Awareness (ETA).



The Protocol Concerning Specially Protected Areas and Wildlife (SPA) to the Cartagena Convention was adopted in two stages: the text of the Protocol was adopted on 18 January 1990 and the initial Annexes, listing relevant marine and coastal species, were adopted on 11 June 1991. The Protocol will enter into force following ratification by nine Contracting Parties.

The Regional Programme for Specially Protected Areas and Wildlife in the Wider Caribbean Region (SPA) was designed to implement the provisions and requirements of the SPA Protocol. Its objectives are: (a) to develop specific management plans for economically and ecologically important species; (b) to significantly increase the number of adequately managed protected areas and species in the region; and (c) to develop a strong regional capability for the co-ordination of information exchange, training and technical assistance in support of national, subregional and regional efforts on management of protected areas and wildlife.

